Appendix D – Response to Comments

Page intentionally blank

Appendix D – Response to Comment

Page intentionally blank

Response to Comments on the Draft Supplementary Environmental Impact Statement for the Completion and Operation of Watts bar Nuclear Plant Unit 2.

The Draft SEIS was posted on the TVA website March 29, 2007 and notice of availability was published in the Federal Register on March 30, 2007. TVA accepted comments on the DSEIS from March 30 until May 14, 2007. A total of 1258 comments were received. These included 1229 form letters, 22 other comments from the public, and 7 letters from state and federal agencies. The comments and commenter names are published in this appendix along with TVA's responses. We would like to thank everyone who took the time to review the DSEIS and provide comments. Your participation has helped us improve the environmental review.

TVA received over 100 comments after the close of the comment period that were not separately handled or addressed. Most of these came as form letters identical to those that were submitted within the comment period. None of the late comments raised issues different from those raised in a timely manner. Therefore, responses to the timely comments also respond to these late letters.

TVA carefully considered and responded to all substantive comments it received, including modifying the text of the SEIS when appropriate. Similar comments were grouped by issue and a collective response was provided. Comments that asserted positions for or against the proposed action or aspects of the action and other non-substantive comments were read and noted for the record.

Form Letter

TVA received 1229 copies of the following letter, some with minor changes or additions, or that were an abbreviated version of the form letter. The basic letter is reproduced below, followed by responses to the issues raised. Letters providing additional comments with the form letter are listed by author separately in the next section entitled "Additions to the Form Letter".

Comment

I am writing to oppose the Tennessee Valley Authority's proposal to complete Unit 2 at the Watts Bar Nuclear Plant located near Spring City, Tennessee. The information contained within the Draft Supplemental Environmental Impact Statement (DSEIS) does not adequately address the effects of a second reactor on the surrounding water sources and communities. The DSEIS does not demonstrate a need for a second nuclear reactor. Critical issues such as waste and security remain unaddressed and unresolved.

The integrated resource plan adopted by TVA in 1995 determined that the completion of Unit 2 was unnecessary to meet the energy demands of its consumers. The DSEIS does not make a comprehensive argument for the employment of a new reactor compared to other energy alternatives nor does it address the original concerns that halted its construction.

In 1999, TVA installed the Supplemental Condenser Cooling Water System (SCCWS) to Unit 1. If Unit 2 is completed, TVA plans to reconfigure the SCCWS to supply both reactors. The DSEIS states that the modifications are not "expected" to increase the

system's impact on the aquatic habitat or the quality of the water it draws from. TVA does not provide the data that substantiates this claim.

The DSEIS acknowledges that the construction of Unit 2 will further burden the low-income communities in Rhea and Meigs counties. Community services, such as medical facilities and public safety, as well as public schools and housing will not be able to accommodate the sudden influx of workers necessary for the construction of a new reactor. The DSEIS offers neither adequate planning support nor the financial resources to compensate for the infrastructural changes necessary to accommodate the influx of workers.

The DSEIS fails to evaluate the environmental impacts and security threats posed by indefinitely storing on-site the additional spent fuel that would be generated by the additional nuclear reactor.

The DSEIS fails to evaluate the environmental impacts of a terrorists attack or sabotage in its environmental impact statement.

Thank you for your consideration of these comments.

Note: The names of those who sent this letter are listed in Attachment A

Response 1
As a supplemental EIS, this document incorporates and updates earlier reviews that examined the impact of constructing and operating two reactors at WBN. Those documents were made available on the TVA website during the comment period for this SEIS.

The need for additional power is addressed in Chapter 1. The analysis shows TVA will need additional baseload power as early as 2010. Completion of WBN Unit 2 would be a timely, cost effective and environmentally acceptable way to add 1150 MW of new baseload generation when compared to other alternatives.

This SEIS tiers from, and relies on TVA's Energy Vision 2020 Final Environmental Impact Statement ("IRP FEIS") (1995). The IRP FEIS considers a wide range of alternatives for responding to future demands for energy on the TVA system, including demand-side management, renewable energy, and conventional generating options. That document is linked to this review process as discussed above and should be consulted respecting alternatives for meeting future demand. Completing WBN Unit 2 was one of the alternatives addressed in the IRP FEIS. TVA did not include it in the final portfolio of resource options that could be used to meet future demand primarily because of financial considerations; these related in large part to assuming a capacity factor that was substantially lower than TVA subsequently achieved at its other nuclear units and expects to achieve if it now completes WBN Unit 2. Consequently, the economics of completing and operating WBN Unit 2 have changed since 1995. As this SEIS states, TVA is now reconsidering its 1995 decision to exclude completion of WBN Unit 2 as a resource option in the final portfolio. Concerns that halted construction are addressed in the 1995 NRC EIS for operation of WBN Units 1 and 2, which was adopted by TVA in 1995.

Edits have been made to Section 3.1 of the SEIS to clarify that intake and discharge flows for the SCCW would not increase if Unit 2 were to be completed. Current plans are to enable supplemental cooling water to be shared by both units, but there currently are no plans to increase the flow capacity of the SCCW system beyond the original design basis. The SEIS presents results and conclusions drawn from in depth hydrothermal analyses using methodologies previously evaluated and approved by the regulatory community. Citations for these studies have been added to Section 3.1.1.

As the SEIS indicates, the construction impacts on local communities would be diffuse--probably more so than in 1995. The state allocation of an additional portion of TVA's tax equivalent payments combined with increased tax revenues and local spending from construction workers and TVA purchases from Tennessee vendors and suppliers would help offset construction-related impacts on social services. Additionally, TVA would, as it has done in the past, work with local communities to help resolve any construction related issues that arise.

Transportation and disposal of radioactive waste and spent fuel are addressed in the environmental review record and are revisited in Sections 3.14 and 3.15. The document concludes that approved processes are in place to adequately provide for waste storage and disposal, a conclusion supported by the NRC's Waste Confidence Rule (10 C.F.R. 51.23). Section 3.15 of the SEIS addresses storage of spent fuel from Unit 2 based on the analysis in the 1999 CLWR EIS, from which this SEIS tiers. Additional information about spent fuel storage is provided in TVA's response to EPAs comment letter (Response. 25). Security threats of on-site spent fuel storage are addressed in Section 3.12., and the referenced detailed study (Kharimi 2007).

The SEIS addresses terrorism risks in Section 3.12.2. Plant security at all U.S. nuclear reactors sites, including Watts Bar, has been upgraded since the terrorist attacks of 2001 and is regulated by NRC. For security reasons, specific security plans are not described in detail.

Additions to the Form Letter

The following comments were added to the body of the form letter. For ease of response, these have been grouped into issue categories and responded to collectively.

<u>Comments in Opposition to Nuclear Power and in Support of Clean, Safe, Renewable Energy</u>

Addiding [sic] Unit 2 at Watts Bar Nuclear Plant was a bad idea when first proposed and is a bad idea now.

Arthur Lum
117 Hartley Street
Syracuse, NY 13203

I strongly oppose the Tennessee Valley Authority's proposal to complete Unit 2 at the Watts Bar Nuclear Plant located near Spring City, Tennessee. There are many problems with this proposal.

Christopher Lish
PO Box 113
Olema, CA 94950

As an American citizen this is my message to state my opposition to further construction of nuclear power generators unless they can be made to a higher and safer standard than those built during the past 40 years.

Lamar Pittman
2011 West 84th Place
Los Angeles, CA 90047

Nuclear power isn't worth it.

Janice Palma-Glennie
Pobox 4849
Kailua-Kona, HI 96745-

The Tennessee Valley Authority's exceedingly stupid for even thinking up this insidious scheme for a second nuclear reactor, and the authority ought to be revoked for this stupid plan of theirs! I'm glad I no longer live in the state of Tennessee!

Lyn Henri
18321 E. 9th St.
Spokane Vly, WA 90016

Stop the proliferation of nuclear energy.

Phyl Morello
984 Harrison Ferry
White Pine, TN 37890

Basically, a second reactor is unneeded, unwanted, and dangerous. What part of "NO" don't you understand?

Barbara Fitzpatrick
2500 W. Valley Dr.
Fayetteville, AR 72703

As an Oregonian who was glad to see the Trojan Nuke plant shut down and dismantled, I suggest you think twice before building one.

Frances Greenlee
63215 O.B. Riley Rd.
Bend, OR 97701

How utterly appalling and irresponsible of the Energy Consortium to even put this on a public agenda--are you people crazy?

Kristen Zehner
118 Blue Spruce
Marshall, WI 53559

I live within ten miles of an aging nuclear power plant that was supposed to be shut down in 2012. It had a certain rate that it was supposed to run at. We were supposed to get virtually free power from it. The waste was supposed to be taken away and stored safely inside a mountain. None of these promises has been kept. The aging plant is being run at 120% of its capacity. It is petitioning to be kept running for 25 more years -- at 120% of its capacity. The horribly dangerous and toxic waste sits in barrels on the floodplain of the Connecticut River. And the high rates of cancer our citizens suffer are being kept quiet in the name of business. NO MORE NUKE PLANTS -- FOR THE SAKE OF THE PLANET FOR MILLENIA TO COME!

Carol Morrison
957 Miller Rd.
E. Dummerston, VT 05346

To paraphrase a famous line in the movie "Treasure of the Sierra Nevada," "We don't need no stinking nuclear power plants."

Frank Hagan
1819 South Stover Street
Visalia, CA 93292

YOU MUST STOP THIS MADDNESS !!! WE SHOULD BE
MAKING PEACE....NOT WAR !!
STOP BEING A EVIL BUSH BOBBLEHEAD!!!!!!!!!

Toni Garmon
103 Honeysuckle Trl.
Dawsonville, GA 30534

We dont [sic] need anymore nuclear reactors, period. How can we continue to tell other countries they cannot have nuclear plants while we are opening new ones.

shawn olsen
9025 waverly dr sw
lakewood, WA 98499

This reactor is unnecessary, please don't build it. The thing will be obsolete before it's spent rods cool down.

Stephen Sleeper
24716 Carnoustie Ct.
Bonita Springs, FL 34135

I live in Sacramento, California. The people of Sacramento were wise enough to force the closure of the Rancho Seco nuclear reactor. I pray the people at TVA are wise enough not to build more reactors.

Maria Crandall
3115 Hurley Way
Sacramento, CA 95864

You think you wil [sic] be using my money for this project. You will not get it without a fight! MINIMALLY this project needs a thorough review and rejection based on fact.

Trisa Perry-Bio
5400 Hwy 29
E-2
Lilburn, GA 30047

Please do not build another nuclear plant. They are terribly dangerous, poorly run, and are not cost-effective.

Jody Wolfe
3931 Warrendale Road
South Euclid , OH 44118

Putting the above concerns and arguments more succinctly: You've got to be crazy to even consider this proposal.

Nancy Woolley
121 Greenbrook Dr.
Stoughton, MA 02072

It is not a clean energy right from the extracting of the substance, to the handling of the substance and the discarding of the waste. There is terrible misinformation about this form of energy and the impact on the environment and the people who work in the mines to the people who are in contact with the dust mounds surrounding the mines etc.

Rosemary Graham-Gardner
P.O.Box 3335
Manhattan Beach, CA 90266

Nuclear power has proven to be excessively expensive and environmentally unsound. The radioactive byproducts will be around for others to deal with for centuries. Nuclear radiation destroys living organisms. There are a number of environmentally safer alternatives, many of which are currently being developed. Frankly, after having studied the issue of nuclear power, it seems to me that it is just plain wrong.

David Shelton
329 Grady McNeilly Rd
Casar, NC 28020

We need to have a healthy clean environment. You need to close down the nuclear reactor now. And find a way for us to have cleaner air. And no new [sic]

William Links
605 South Main St. #16
Fond Du Lac, WI

Okay, here we go. You do not need to support money grubbing jerks who do not want to stop global warming. You do not need to put in another Nuclear Plant. All that would do is let a money grubbing contractor make money hand over fist that you steal from tax payers. It will also promote more global warming and of course you would need to invade wilderness areas to find more coal to add power to the plant. So do the right thing and turn down this "request" and tell the bushie cohort NO!

Kelly Arellanes
23 Bradley St
Bryant, AR 72022

Response 2
Comments noted. These comments oppose nuclear power generation and oppose completing WBN Unit 2 because of this. More substantive concerns are addressed in the text of the SEIS or in other comment responses.

Comments on Alternative Energy Use

The people of the US, and the animals that cohabitate the land with us, don't want unsafe nuclear power, an industry that leaves behind nuclear waste that can't be cleaned up. Put your money into developing more renewable energy sources.

Annette Rauch
15 Summit Farm Dr
East Greenwich, RI 02818

I consider this of greatest importance. Until the health effects of nuclear are fully addressed, until there is no possibility of any kind of radiation release (which is impossible) and until the issue of storing of radioactive waste is fully solved, we MUST NOT create any more nuclear power. THE REAL ANSWER IS SOLAR, WIND AND WATER POWER.

Karil Daniels
2477 Folsom St.
San Francisco, CA 94110

I am writing to plead for protection for the envirnoment [sic] and animals wherever possible. Please pursue clean renewable energy such as wind, solar, hydrogen fuel cells etc.

James Pszanka
1436 W Rosemont Ave
Chicago, Il 60660

Nuclear Energy is dangerous! Please look into Windmills and Solar Energy!

Sue Zada
59 Derby Avenue
Seymour, CT 06483

Nuclear energy is neither clean nor safe. We have better technologies to meet our energy needs.

Julie Parisi Kirby
36 Purdy Hollow Road
Woodstock, NY 12498

Facing the possibility of a shortage of fossil fuels does not mean that we need to charge ahead with ill-considered additional nuclear power plants. Much of the current global warming crisis is directly attributable to our complete failure to think through the foreseeable consequences of our ever-increasing use of oil. We must now confront the need for alternative energy sources with serious concern for safety and reliability.

Susan Hathaway
5107 Passons Boulevard #313
Pico Rivera, CA 90660

We have solar, wind, biofuels, and conservation. We dont [sic] want or need nuclear energy.

Lawrence Abbott
433 Harlan St. #307
San Leandro, CA 94577

Nuclear power is not needed. We have alternative energies that can provide all of the power we need without contaminating our environment with radioactive material.

Kathy Gere
1369 Carleton Cir
Naperville, IL 60565

We need renewable energy in the form of solar and wind energy, not nuclear energy that both creates nuclear waste to store for thousands of years and creates risks of catastrophic accidents or terror acts.

Lauryn Slotnick
66th Ave
Douglaston, NY 11362

The people of the US, and the animals that cohabitate the land with us, don't want unsafe nuclear power, an industry that leaves behind nuclear waste that can't be cleaned up. Put your money into developing more renewable energy sources.

Annette Rauch
15 Summit Farm Dr
East Greenwich, RI 02818

PLEASE DO [not] BUILD THIS NUCLEAR POWER PLANT. WE DO NOT NEED ANYMORE POLLUTING DANGEROUS TERRORIST TARGETS. PLEASE LOOK TO OTHER MEANS (E.G. ALTERNATIVE & RENEWABLE ENERGY SOURCES AND CONSERVATION) TO FULFILL ANY ENERGY NEEDS.
THANK YOU.

Conor Soraghan
4366 Saratoga Ave
San Diego, Ca 92107

With every nuclear reactor that we build, we create more problems for our grandchildren who will have to live with our waste and protect it from terrorists. This is insanity. We must put our dollars to work developing truly clean energy that will need no apologies to future generations. Thank you for your consideration of these comments.

Cathryn Schiesser
2402 Dixie Farm Road
Pearland, TX 77581

Furthermore, safe, clean renewable energy sources, such as wind and solar, would be much less costly and would come on-line much sooner.

Dr. Dorothy K. Cinquemani
400 Lake Ave NE
Largo, FL 33771

Response 3

The final portfolio of resource options that TVA analyzed in the IRP EIS, and subsequently adopted, include several different renewable energy measures. TVA has implemented a number of these measures and is considering implementing more of them. These measures do not, however, offset the need for more baseload generation. There are several reasons why renewable energy sources are not suitable for meeting base-load generating needs, including availability, reliability, and cost. Renewable energy also has its own environmental impacts that cause concern. For example, it would take 1200 large wind turbines, 2.5 MW each placed on 200 miles of ridgeline at a cost of approximately $3.5 Billion to equal the energy from one 1000 MW nuclear unit. TVA operates the southeast's largest wind turbine facility. When siting these turbines, TVA encountered significant public opposition in large part due to concerns about visual impacts. However, on May 31, 2007, the TVA Board approved a Strategic Plan that endorses enhanced reliance on renewable energy resources, energy conservation, and energy efficiency for meeting the growing demand for energy on the TVA system.

See Response 4 regarding comments on safety and security, and Response 6 regarding comments on nuclear waste and spent fuel storage.

Comments on Energy Conservation

It shouldn't surprise us to see yet another amazingly bad idea surface during the current national administration, yet the idea of expanding nuclear power facilities is uniquely unwise. I'm sure you're aware that our nation could easily reduce its energy consumption by 30% or more through conservation measures, and that nuclear power facilities pose extraordinary, unjustifiable vulnerabilities.

Don Kelley
12637 Merritt-Estes Rd.
Deadwood, SD 57732

In any case, would it not be smarter to start with conservation first? That would not produce any negative effects.

Georgia Locker
713 Duke Square
Fort Collins, CO 80525

REPLACMENT OF INCANDESCENT BULBS WITH COMPACT FLORESCENTS IS QUICKER AND CHEEPER [sic].

Mary Markus
10462 Ramona Way
Garden Grove, CA 92840

Response 4

TVA agrees that energy efficiency and demand-side management measures do help manage energy demand. It has long supported energy efficiency through its existing "energy right" and "direct load control" programs offered by local utilities that distribute TVA power. In addition, TVA's interruptible pricing products offer the potential for more than 1500 MW peak demand reduction. The final portfolio

of resource options that TVA analyzed in the IRP EIS, and subsequently adopted, include various energy efficiency measures. TVA has implemented a number of these measures and anticipates implementing more of them. Demand is expected to continue to grow at the rate of about 2 percent per year. This is sufficiently high that TVA's decision to address demand with a mix of new generation, renewables, and energy efficiency and demand-side management measures remains the best course of action.

On May 31, 2007, the TVA Board approved a Strategic Plan that endorses enhanced reliance on renewable energy resources, energy conservation and energy efficiency for meeting the growing demand for energy on the TVA system.

See Response 4 regarding comments on safety and security.

Comments on Safety and Security

NUCLEAR POWER IS NO SAFER NOW THAN AT THE TIME OF THREE-MILE ISLAND!!

Probyn Gregory
1766 Las Palmas
LA, CA 90028

I live in Vermont, about 12 miles fron [sic] Vernon's Yankee Nuclear plant. Trust me, you don't want to have this potential threat anywhere near you. We have put up with leaks into the atmosphere, mysterious disappearing spent fuel rods and the kicker is that there is no safe place to store the waste we are generating for the next few hundred thousand years. This is not the answer to our energy problems.

Daphne Kilbourn
17-27 Carol Brown Way
Putney, VT 05346

The DSEIS FAILS to evaluate the ENVIRONMENTAL IMPACTS and SECURITY THREATS posed by indefinitely storing on-site the additional spent fuel that would be generated by the additional nuclear reactor. The DSEIS fails to evaluate the environmental impacts of a terrorists attack or sabotage in its environmental impact statement. THIS PROJECT IS A NATIONAL SECURITY THREAT.

Trisa Perry-Bio
5400 Hwy 29, E-2
Lilburn, GA 30047

In these days of terrorism and enviromental [sic] collapse, Nuclear Power should not be an option anymore. I live near San Onofre Nuclear Powerplant and it scares me how easy it would be for a terrorist to attack it.

Randall Hartman
2345 Vista Hermosa
San Clemente, CA 92673

Nuclear energy is terribly dangerous, and the danger will last for thousands of years--longer than any society has ever been stable.

Linda Schermer
500 Mtn Lilac Dr
Sedona, AZ 86336

I STRONGLY OPPOSE the Tennessee Valley Authority's proposal to complete Unit 2 at the Watts Bar Nuclear Plant located near Spring City, Tennessee. WE DON'T NEED ANYMORE NUCLEAR WASTE!!!!

Marilyn Britton
16 Long Hill Estates
Peterborough, NH 03458

I am on my computer which is powered by solar panels. This is the way to go - this and a number of other clean, renewable methods (wind turbines, traffic grids, etc.) of producing energy. No one has yet figured out a way to generate power from nuclear plants without also generating alarming amounts of dangerous, toxic waste that is even now accumulating and posing a serious threat to all of us.

Deborah Weinischke
POB 602
Floyd, VA 24091

Response 5

Safe operation of our nuclear plants is of utmost importance to TVA. WBN has received favorable overall plant ratings from the Institute of Nuclear Power Operations (INPO), an organization created by the nuclear electric utility industry to promote the highest levels of safety and reliability in the operation of nuclear plants. The safety of nuclear plants is highly regulated by the NRC and TVA continues to comply with all applicable safety standards. See Sections 3.12, 3.14, and 3.15 for analyses of impacts from accidents, terrorism risks, radioactive waste disposal, and spent fuel storage, respectively.

See Response 3 regarding comments on renewable energy and Response 6 for comments on nuclear waste and spent fuel storage

Comments on Nuclear Waste and Spent Fuel Storage

…Also I am in opposition unless methods are developed to recycle the nuclear wastes into other useable by-products so that very little actual radioactive wastes remain...

Lamar Pittman
2011 West 84th Place
Los Angeles, CA 90047

While the French recycle their uranium [sic] we bury it or use the spent uranium in artillary [sic] shells and spread it over the ground. Global warming came about by the machismo "We have to conquer Nature." We have to work with Nature, not destroy what has supplied our food, our air, our water, our material things. Only a fool would want to conquer his best friend, but this happens every day in our history as we over-throw government after government, crawl in bed with the likes of Samosa, Pinochet, Hussien, Noreiga and others in order to exploit the workers and the resources. Corporate greed is

behind these moves and members of Congress who serve as their lap dogs are part of the problem, not part of the solution. The solution is working with nature, ending excess materialism by amassing poor quality items made in sweat shops and ending up dumping them in our land fills.

William Welsch
11 Lockhart Ranch Road
Lewiston, CA 96052

Before doing anything, please tell all of us two things: 1. Where and how will the nuclear waste from this plant be disposed of? 2. Is there any chance of a nuclear meltdown? If either of those questions cannot be adequately answered or dealt with in a responsible way, what in the world are we doing still messing around with this dangerous, toxic nuclear crap?! It must all boil down to the same old story -- greed and money -- as it defies common sense why nuclear power is still pursued as a viable producer of energy. It is dangerous and we don't know how to dispose of it or how to "fail well" in the event of a meltdown. Stop the madness! Pursue other, safer forms of energy and prosper greatly from that instead!!

Ursula Schnicke
7728 El Manor Ave.
Los Angeles, CA 90045

The answer is No, to a longer term pollution [sic].

Joe Edwards
1232 High Peak Ln
Shipman, VA 22971-

WE CANNOT TAKE CARE OF THE NUCLEAR WASTE WE NOW HAVE!!!

Patricia Standring
30335 Rainbow View Drive
Agoura Hills, Ca 91301

YUCCA MTN IS A DEBACLE - IT CANNOT BE EXPECTED TO CONTAIN ALL NUKE WASTE.

Karen Kinsman
64 Marshalls Cnr Woodsville Rd
Hopewell, NJ 08525

Also, typical of these environmnetal [sic] impact studies they simply do not address the monitoring of dangerous nuclear waste for the next thousand years!

Elliot Moss
10244 W. Powers Ave
Littleton, CO 80127

I'M SURE YOU ARE AWARE THAT PLUTONIUM WASTES HAVE A VERY LONG, TOXIC LIFE, SOMETHING LIKE 250,000 YEARS--NO MATTER WHERE THESE WASTES ARE STORED, THEY WILL NOT BE SAFE. IN 50 YEARS OR MORE, NO ONE HAS COME UP WITH A WAY TO SAFELY STORE THIS--WE DO NOT WANT NUCLEAR POWER ENERGY, ESPECIALLY IN THIS TIME OF TENTATIVE WEATHER THREATS BEING CAUSED BY GLOBAL WARMING THAT COULD CAUSE BIG DAMAGE ALSO TO NUC.POWER PLANTS, SPREADING POISONOUS TOXINS EVERYWHERE!

Christina Graybill
5431 Auburn Blvd., #150
Sacramento, CA 95841

How can you be considering building a nuclear plant when you have no way to safely dispose of the highly radioactive spent fuel?

Chadwick Cox
2241 Ravenwood Ln
Norman, OK 73071

Where will the nuclear waste go and how is it proposed to be safely transported there?

Helen Kopp
12521 Indian Hollow Rd.
Grafton, OH 44044

TVA--
I have read and agree with ehe [sic] following boilerplate, but let me just sum up my feelings by simply saying that nuclear fuel remains toxic for far longer than we are able to secure it. OK--not for the Public Citizen boilerplate...

Thomas Turner
20829 12th Ave. West
Lynnwood, WA 98036

What will you do with the radio active waste? Will you dump it on us like the rest of the industry is doing? And it virtually lasts forever! Eternal pollution!

Gabino Rendon
415 Moreno Street
Las Vegas, NM 87701

Response 6

The handling, transportation and storage of spent fuel and irradiated waste is highly regulated and can be and is safely managed. NRC has independently determined that these waste forms can be safely stored until they are eventually disposed of permanently. TVA's plans for transporting and storing spent fuel and radwaste that would be generated during the operation of Unit 2 are described in Sections 3.16, 3.12, and 3.15, respectively.

Comments on Water Quality

Also contingency plans must be made in anticipation of severe droughts or any other event which would compromise an adequate cooling water supply. I have wondered why the heated water couldn't simply be sprayed into the air so that it would loose most of it's heat before it fell back to the river.

Lamar Pittman
2011 West 84th Place
Los Angeles, CA 90047

The DSEIS fails to consider the 5-6 year droughts in the Midwest and the Southwest and the increasing demand for water resources for agriculture, fire suppression and growth in communities. Nuclear power impacts existing water supplies and global warming will add to this imbalance. The DSEIS fails to acknowledge or consider these impacts.

Deanna Essert
6262 W. Dimond Blvd.
Anchorage, AK 99502

TVA does not provide the data that substantiates this claim [regarding potential impacts to water quality]. I have to question whether such data exist--and I have to say that I doubt it. In any case, in dealing with something as potentially dangerous as nuclear power, common sense dictates that all reasonably possible contingencies be provided for, not merely what is "expected" (or "hoped"). Common sense also demands quantification of what is "expected" and how likely it is estimated to be. This is noticeably absent from the DSEIS...

Susan Hathaway
5107 Passons Boulevard #313
Pico Rivera, CA 90660

Response 7

TVA's analysis of potential impacts to water quality is summarized in Section 3.1. Most of the waste heat created by WBN is dissipated in the atmosphere by the cooling towers (i.e., "raining" water in the air), which substantially reduces the need for cooling water from the river. However, to support plant operations, some water is still needed from the Tennessee River. For one unit operation, experience has shown that approximately 80 cfs is withdrawn at the intake pumping station (see Figure 2-1 and Appendix B). For two-unit operation, the average withdrawal is expected to be about 133 cfs (Section 2.2.2). Based on computer simulations with the current TVA river-operating policy, the minimum daily average flow from Watts Bar Dam, located 1.9 miles upstream of the plant, is expected to be about 3300 cfs (Table 3-2). The simulations include the driest year ever recorded in East Tennessee. For comparison, the average annual flow past the plant is about 27,000 cfs. Thus, even under extreme low flow conditions, WBN will be withdrawing only about four percent of the daily average river flow from the river. Information about the impact of the plant for low flow conditions has been added to Section 3.1.1.

To support certain plant systems, some additives are mixed with the water that is withdrawn from the river. However, before the water is returned to the river, the water is tested, and if needed, treated to satisfy water quality criteria for the river.

The amount of additives in the water is regulated by the State of Tennessee in accordance with the WBN NPDES permit.

Comments on the Adequacy of the SEIS

IN short, the DSEIS, as filed, is a bogus and worthless document and its total dismal failure to adequately address substantive issues should lead to an automatic dismissal of the proposal to restart construction of the second reactor.

James Hurst
7207 Lunar Dr
Austin, TX 78745

SINCE YOU ALREADY KNOW ALL OF THIS IS TRUE, JUST WHY ARE YOU ALLOWING THIS TO HAPPEN? BEEN A SLOW YEAR?

K. R. Pence
104 Sullivan St. - C
New York, NY 10012

Response 8

Comments noted. In its review of the SEIS, EPA asked TVA to better address a few topics, but described it as "clearly written" and providing "useful information."

Comments on the Cost of Power

When decommissioning and artificial government subsidies are taken into account, nuclear power is far more expensive than any other standard alternative. And when sequestering the nuclear waste for millenia is taken into account, it's absolutely prohibitive. And when the potential for disaster is taken into account, it's inexcusably reckless. It was a bad idea then, and still is!

James Mittl
142 Nero Road
Golden, CO 80403

Even their cost-effectiveness is a sham. If they were not kept afloat by government breaks and subsidies, they would be patently too expensive to build and run -- instead of insidiously expensive to the taxpayers.

Carol Morrison
957 Miller Rd.
E. Dummerston, VT 05346

We in NH would like to have some subsidized alternative energy but more subsidies for nuclear--NEVER.

Rod Zwirner
5 Myrtle
Antrim, NH -3440

Response 9

TVA's 1995 IRP EIS, from which this EIS tiers, included an in-depth trade-off analysis of the alternative power sources considered (page 2.7), including economics. Additional information has been provided in Section 1.6, Need for Power, to better address the issue of the power costs. See Table 1-2 showing how the addition of WBN Unit 2 is estimated to lower the average delivered cost of TVA power by 3.7 percent. TVA is the nation's largest public power provider and is completely self financing. It receives no appropriations (tax-payer dollars). As described in Section 1 of the SEIS, TVA is conducting a $30 million Detailed Scoping, Estimating, and Planning study to better evaluate the cost effectiveness and feasibility of completing Unit 2.

Comments on Socioeconomic Effects

Hasn't the TVA done enough damage to the residents of Tennessee? You took away my family's land and now you want to built a plant that will pollute and forever damage the land. You've already built a dam, that hasn't stood up to the claims made for it and now you want to build a nuclear plant that will also not stand up to what you say.
The DSEIS acknowledges that the construction of Unit 2 will further burden the low-income communities in Rhea and Meigs counties. Community services, such as medical facilities and public safety, as well as public schools and housing will not be able to accommodate the sudden influx of workers necessary for the construction of a new reactor. The DSEIS offers neither adequate planning support nor the financial resources to compensate for the infrastructural changes necessary to accommodate the influx of workers.

Dorinda Kelley
8829 ne davis
Portland, OR 97220

Here we have another case of NIMBY (Not In My Back Yard) when dangerous facilities such as landfills, strip mines and nuclear plants are built in communities too poor to afford top-notch lawyers to take the government to the Supreme Court! It seems that there is a need to involve some top environmental and CIVIL RIGHTS attorneys to find out why this dangerous project is being forced down the throats of poor Tennesseans. The DSEIS offers neither adequate planning support nor the financial resources to compensate for the infrastructural changes necessary to accommodate the influx of workers.

Trisa Perry-Bio
5400 Hwy 29
E-2
Lilburn, GA 30047

Response 10

As the SEIS described, there would be both positive and negative impacts in Rhea, Meigs, and surrounding counties as a result of the large construction workforce. These impacts would be temporary and offset by increased sales tax revenues and the state's distribution of TVA tax equivalent payments to the affected counties. Impacted counties could receive payments each year during construction and some lesser amount of funds for the three years following completion of Unit 2.

Other Comments From the Public

Comment
My biggest concern is for drinking water quality and the possible damage that more TRITIUM could do to public health -- especially for developing fetuses.
Linda Cataldo Modica, 266 Mayberry Road, Jonesborough, TN

Response 11
As noted in Section 3.1.3, completion and operation of WBN Unit 2 would have no effect on groundwater or on drinking water supplies. Monitoring stations in and around the plant boundaries would detect the presence of any harmful elements in the ground or groundwater. As noted in Section 1.1, the proposed action does not include producing tritium for DOE at WBN Unit

Comment
In a telephone call, Ms. Helen Donald said that her primary concern was the siting of WBN just below an aging dam in an "undefined seismic zone". She is concerned about the risk to the public in the event of catastrophic dam failure from an earthquake, in light of problems with dams of similar age such as Wolf Creek Dam on the Cumberland River. She questioned whether it made sense to add a second unit at this location in light of such risk. She said she believes the SEIS should address this issue in sufficient detail to assure adequate consideration in the decision and that the public is fully informed.
Ms. Helen Donald, Columbus, GA.

Response 12
The problem with Wolf Creek Dam on the Cumberland River is the result of excessive seepage in the rock foundation that has been problematic since the dam was constructed. TVA's Watts Bar Dam has a different type of rock foundation and has no problem with foundation seepage. Additionally, Watts Bar Dam is inspected frequently and has been evaluated for earthquake risks as part of the TVA Dam Safety Program. These evaluations concluded that Watts Bar Dam would withstand seismic shaking comparable to that used for the seismic design of Watts Bar Nuclear Plant. The draft of SEIS section 3.10, Seismic Effects, has been modified to provide a reference to WBN FSAR section 2.5 which discusses the seismic design basis of WBN and the area geology in considerable detail.

Comment
I have been on TVA power since 1957, and have suffered through past environmental nuclear actions by TVA, including the ill-market researched Phipps Bend plant. The same error is being made in the proposal to complete Unit 2 as was made prior to Phipps Bend construction, terminated after expenditure of huge amounts of user money. (new paragraph) No attempt was made then, nor has any now been made in the area of user incentives to conserve. A study needs to be made on the potential for such incentives to fill the need for projected need for increased generation capacity. Billions of dollars will be needed for Unit 2 completion. Billions more will be needed as contingency planning for disposal of waste from the plant and eventual disposal of its

materials of construction when the plant eventually will have to be deactivated. (new paragraph). Conservation has succeeded in California in saving billions planned for construction of new power generation facilities. TVA must initiate SERIOUS consideration of this type of plan as an alternative to new generation facilities of any kind. I request this be made a part of the hearing record.

Powell Foster, 2363 Friendship Dr., Bristol, Tennessee 37620

Response 13

In conjunction with this SEIS, TVA has undertaken a Detailed Scoping, Estimating, and Planning Study (DSEP) to determine the feasibility of completing WBN Unit 2, known as the DSEP. The DSEP is a rigorous evaluation of the cost, schedule and risks to complete the unit. The TVA Board will consider the DSEP report and the Final SEIS in their decision as to whether to complete Unit 2. A wide range of supply and demand side strategies for meeting the power needs of its customers was evaluated in TVA's IRP EIS. See Response 4 respecting TVA's energy conservation activities and plans.

Comment

The following record is the transcription of oral comments made by Frances Lamberts at the Public Meeting held at Rhea County High School.

I am Frances Lamberts from Jonesborough, Tennessee, and I came down here today to say something to the TVA. What I want to say is that as the very first subscriber to the Green Power Switch program, when that program became available at my power distributors, I became the first subscriber, and now I feel very much let down. I feel almost betrayed by TVA. When it seems that TVA, instead of pursuing clean power sources of the future, it seems to do so only as a sideline, while as I now learn again its main interest in investment seems to be the destructive and dangerous technologies of the past.

The press release states that TVA is seeking to, quote, maximize the use of an existing asset, namely, the Watts Bar reactor unit to be completed. Our ultimate, reliable and beneficent asset is that luminous body up in the sky that has been illuminating and warming the planet for billions of years, that sends half a million kilowatt hours of radiant energy onto an average size roof in a year's time even in our latitude. The TVA should be urging and helping to have solar arrays installed on roofs and south-facing walls of every government building in the valley, every school and library and every business and homeowner as they make their building plans.

Five years or so from now, we are told in The European Press, technology developments will make solar power, quote, cheap enough to compete with carbon generated electricity, even in upper Siberia, unquote, and, likely, it will, quote, undercut oil, gas, coal and nuclear power by up to a half, unquote. Instead of benefiting from such technology toward the ultimately cheapest, most available, and accessible distributed power, we, in the valley, will be stuck with a dangerous and costly form of electricity brought over hundreds of miles of transmitter wires from some central facility. The TVA should look forward, expanding and promoting distributed, safe, renewable energy in all forms, Generation Partners, millions of times not backward to centralized control and last century energy technology.

It bears reminding ourselves, since I've used the adjectives "safe" and "dangerous" a couple of times, that fire from a small candle at a TVA plant at Browns Ferry destroyed 1600 cables, leaving its control room operators without knowledge or ability to monitor and control the reactor safety systems. A potentially calamitous radiation release was avoided by sheer plain luck. And that at Bessie Davis [as stated], in Ohio, boric acid had over months or perhaps years been eating a hole 145 millimeters deep into the lid of the reactor vessel to within less than 5 millimeters of the vessel interior when finally detected, just a few millimeters or a few minutes away from potentially horrible disasters.

This inherent vulnerability of nuclear power facilities is magnified today by risks from terrorism. It is a risk evidently known though not easily acknowledged when one considers prolongation of the Price-Anderson Act with its shifting of catastrophic financial insurance burdens on to the public. Our country can do better. The TVA can do better.

Regarding environmental effects of last century's predominant ways of producing electricity, TVA, and we all need to pay attention to what these do to our water resources, when you look through Tennessee Statistical Abstracts, Table 1217, in the 2003 Volume, details how water is used in Tennessee. Of ten billion hundred million gallons of fresh water withdrawn every day from our rivers and lakes, eight billion three hundred million, that is more than 82 percent, go to the account of the thermal electric power plants.

Among these, nuclear plants are the heaviest consumers by far, using more than 50 gallons of water per every kilowatt hour of electricity they produce. Although it is not a consumptive use per se, think how much better off our rivers would be without thermal alteration of so much of their flow and without millions of fish and other aquatic creatures continually being killed through entrainment. Think how much freer and safer we people could feel if we didn't have to worry about keeping nuclear reactors cooled with billions of gallons should drought conditions make us short on water.

Will we be hoarding our freshwater supplies for electricity forever when its production through renewable sources can completely obviate such dependence on water? I urge the TVA to go in the other direction, away from nuclear energy. Instead of investing more billions in its expansion, invest them in energy efficiency benefits and in expansion of renewables in the Green Power Switch and the Generation Partners programs. Thank you much.

Francis Lambert
113 Ridge Lane
Jonesborough, TN 37659

Response 14

TVA appreciates your interest in the Green Power program and other demand side management approaches. We agree that energy conservation and alternate energy sources must be an important component of TVA's future energy mix. Please see Responses 1, 10, 3, 4 and 5 for a response to concerns about water supply, cost of power, energy conservation, green power, and safety, respectively.

Comment
Dear TVA and NRC: I am a recently retired utility employee now living in the state of TN near the Watts Bar Station. I have been here nearly 10 years now and have followed various activities at the nearby nuclear plant. My primary concern is that Tritium is being produced at unit 1 and this makes the nuclear station a primary target for a terrorist act. The final contruction [sic] of unit 2 will require thousands of construction workers and hundreds of thousands of entries into the complex over the next several years. How long will Tritium be produced at the power plant? What is the time table to complete Brown's Ferry as an alternative for additional capactity [sic]? What about using Sequoyah Nuclear station for Tritium production? I understand the need for additional power for the coming years. I would also expect WB nuclear unit 2 to be completed at some point in the future even it is not selected for completion in the near future.

Kevin Millikan
617 Sandpiper Dr
Vonore, TN 37885

Response 15
As stated on page one of the SEIS, TVA is not proposing to produce tritium at Watts Bar Unit 2. See FEIS, Production of Tritium in a Commercial Light Water Reactor (DOE 1999) for a discussion of potential impacts associated with the production of Tritium at Watts Bar Unit 1. TVA's security measures at Watts Bar—and all TVA nuclear plants-- have been upgraded since September 11, 2001 in compliance with NRC requirements. The potential for terrorist activity related to completion of Watts Bar Unit 2 is discussed in Section 3.12. As discussed, analysis shows that by as early as 2010, TVA is expected to need additional baseload capacity.

Comment
Nuclear power should be ceased because it produces dangerous biproducts that no one knows what to do with. We should get electricity from the sun and wind and not produce nuclear waste that pollutes the environment. Peace,

Michael Ryan McCoy
5019 Jacksboro Pike
Knoxville, TN 37918

Response 16
Comment noted. See Response 3 regarding alternate energy and Response 6 regarding nuclear waste and spent fuel.

Comment
I am writing to oppose the Tennessee Valley Authority's proposal to complete Unit 2 at the Watts Bar Nuclear Plant located near Spring City, Tennessee. Nuclear power is a short-sighted solution to our energy needs. To produce nuclean [sic] power we need to transport radioactive materials to the plant, dispose of radioactive waste in such a way that it does not leak out and is not vulnerable to theft by those who would use it to make dirty bombs--and we have to be able to guarantee safe storage for 1000s of years. As a country we should be trying to figure out ways to decommission nuclear plants, not trying to build more of them. Thank you for your consideration of these comments.

Elizabeth Dachowski
4018 Nebraska Ave
Nashville, TN 37209

Response 17
Transportation and storage of radioactive waste and spent fuel are addressed in SEIS Sections 3.14 and 3.15. Section 3.17 covers decommissioning. Also see Response 3 regarding alternative energy sources and Response 6 for radioactive waste and spent fuel.

Comment
As a very young male I supported Nuclear power. All that potential energy, nearly unlimited power straining against limited constraints. Like driving a powerful car, straining to burst free...As a young adult I was able to study physics and mathematics. Suddenly I was no longer enamored of nuclear power. I realized that all that energy was being used to boil water, BOIL WATER! OMG! I can do that with anything that gives off heat - the rays of the sun, geothermal energy, electricity from windmills... anything that makes a fire [sic]. Soon after that I had the opportunity to look at the plans for one of the most popular power plants (built by GE). I could spot a number of design flaws. I wasn't even an engineer yet. Didn't any one actually LOOK at these plans!

That was some years ago. The potential dangers have become public knowledge and this form of electricity [sic] production had gone out of favor, untill [sic] Global Warming was finally recognized as a rapidly approaching disaster. However, this does not mitigate the problems that still exist.

I oppose the Tennessee Valley Authority's proposal to complete Unit 2 at the Watts Bar Nuclear Plant located near Spring City, Tennessee. Critical issues such as waste and security still remain unresolved. Thank you for your consideration of these comments.

Steve Cohn
1812 Mulford
Evanston, IL 60202

Response 18
Comments noted. See Response 3 regarding alternative energy sources, Response 5 regarding safety and security, and Response 6 regarding nuclear waste and spent fuel.

Comment
I strongly oppose the Tennessee Valley Authority's proposal to complete Unit 2 at the Watts Bar Nuclear Plant located near Spring City, Tennessee. I think nuclear energy is not the way to address our energy predicament. I respectfully urge that the TVA instead become a leader in clean, renewable, alternative energy sources. What is the TVA contributing toward the growth of wind power and solar power? Recent innovations are making these clean energies more efficient and affordable. Please support them.

I am concerned that the Draft Supplemental Environmental Impact Statement (DSEIS) does not adequately address the effects of a second reactor on the surrounding water sources and residents of the neighboring communities. Furthermore, radioactive waste

for untold centuries is too high a price to pay for our energy needs. Thank you for your consideration of these comments during the public comment period.

Sara Bhakti
521 7th Ave
Kirkland, WA 98033

Response 19
Comments Noted. See Responses 3, regarding alternative energy sources and Response 6 nuclear waste and spent fuel. See Section 3.1 for discussion of ground and surface water quality and section 3.13 for potential radiological effects on the area surrounding WBN.

May 14, 2007

TVA NEPA Services
Attn: Ruth Horton
400 Summit Hill Drive (WT-11D)
Knoxville, TN 37902
tvawattsbar2@tva.com

Re: Comments on the draft Supplemental Environmental Impact Statement for Completion and Operation of Watts Bar Nuclear Plant Unit 2

To Whom It May Concern:

The following are the comments of Southern Alliance for Clean Energy on TVA's draft Supplemental Environmental Impact Statement (DSEIS) for completion and operation of Watts Bar nuclear plant unit 2.

Southern Alliance for Clean Energy (SACE) is a regional not-for-profit, nonpartisan conservation and energy consumer organization focused on energy policy, including nuclear concerns, for well over twenty years with members in Tennessee and throughout the Southeast.

Water Impacts
Nuclear power plants have a large impact on water quantity and quality. Nuclear power plants release radioactive contaminants and hazardous chemicals into surrounding water resources, contribute greatly to thermal pollution, negatively impact aquatic life, and require enormous volumes of water in order to operate—requiring more water use than other traditional forms of energy production and significantly more water than energy efficiency measures and clean energy technologies such as solar, wind, and bioenergy.

The Tennessee River, upon with Watts Bar is located, is already stressed. Additionally, TVA also operates the two Sequoyah Westinghouse Electric ice condenser reactors about 10 miles from Chattanooga, also along the banks of the Tennessee River.

We are concerned about the lack of data in the DSEIS on the water use of the proposed new reactor and the complete lack of mention of water consumption by the existing reactor and the proposed new reactor. On p. S-2 of the DSEIS, it mentions that with Unit 2 online, the total water intake for the two reactors at Watts Bar would "increase by 33 percent over present conditions but still would be within the original design basis of the plant for two-unit operation. A corresponding increase of essential raw cooling water and raw cooling water chemical additives of 33 percent would occur." There is no mention whatsoever about water consumption, nor any specificity in terms of raw data for water withdrawals. The DSEIS often refers to old documents, such as TVA's 1972 FEIS and its adopted 1995 FSEIS. This is not sufficient. For

instance, it is not clear why there would only be a 33% increase in water intake when a second reactor comes into operation. Regardless, we still consider a 33% increase in these categories significant such that they would likely have some type of negative impact on the Tennessee River. Additionally, the current water use of the existing reactor, including consumption, should be listed along with that of the proposed Unit 2 reactor at Watts Bar.

Another problem with water discharged from nuclear power plants is its temperature. This water is warmer than the water into which it is discharged, and the resulting "thermal plumes" cause stress on aquatic life, which can include commercially important fish and shellfish. Warmer water temperatures proximate to a nuclear power plant result in conditions that effect the feeding and breeding patterns of various species. For instance, nuclear power plants aggravate the problem of low dissolved oxygen levels through its heated discharge to lakes and rivers. The state of Tennessee voiced concerns to the U.S. Nuclear Regulatory Commission (NRC) about this impact on mussel beds downstream from the Sequoyah nuclear plant, which suffered from even lower oxygen levels as it is also downstream from the Watts Bar nuclear plant.[i] There is no mention of this in the DSEIS. Further, when shutdowns occur, large and rapid fluctuations in the water temperature can harm or kill aquatic species.[ii]

TVA needs to further study the impacts of thermal pollution to help reduce Watts Bar's negative impacts to surrounding water resources and provide a more thorough analysis of the benefits to water quantity and quality from energy efficiency and clean, renewable energy supplies than is currently addressed in the DSEIS.

Reactor Design Vulnerabilities & Security Concerns

Nuclear power is the only form of energy that could cause thousands of injuries and deaths. A 1982 Congressional report estimated that if a serious accident occurred at just one of the reactors at Watts Bar, it could cause up to 5000 peak early fatalities, 4000 peak early injuries, 11,000 peak cancer deaths, and cost over $80 billion (in 1982 dollars) in damage.[iii]

The existing Watts Bar Unit 1 is an ice condenser nuclear reactor and Unit 2, when completed and operational, will be of the same design. Ice condensers are considered to have serious design flaws.[iv] TVA needs to study the impacts an accident at Unit 1 would have on the ability to operate Unit 2 and vice versa.

Additionally, Watts Bar Unit 1 is the lead reactor to produce tritium, a radioactive form of hydrogen, for a tritium replenishment program with the Savannah River Site that is currently underway. Will Unit 2 become part of this tritium production program?

Further, it is unclear from the DSEIS whether TVA has addressed or even acknowledged the several security measures that have been or will be proposed by the NRC. For instance, the NRC has issued several proposals for national security measures related to nuclear power plants post-September 11. For example, an April 24, 2007 NRC press release announced a future security proposal that "would require each applicant for a new reactor design to assess how the design, to the extent practicable, can have greater built-in protections to avoid or mitigate the effects of a large commercial aircraft impact, making them even more resistant to an attack…and that even for plants already certified it would be 'in the interest of both the designers and their clients to

adopt these changes at the design stage.'"[v] Will Watts Bar Unit 2 be affected? If not, what security 'improvements' has TVA adopted since 9/11 at the existing and proposed Watts Bar reactors? If TVA has not adopted additional security improvements and is choosing not to do so, why not? It is unconscionable to bring new nuclear capacity online without having to comply with the security requirements that 'new' reactors must adhere to.

High-level Radioactive Waste

Adding an additional reactor at Watts Bar would exacerbate existing space issues regarding onsite spent fuel and create decades worth of additional, dangerous high-level nuclear waste, with no practicable or thorough means of securing it.

The DSEIS fails to evaluate the environmental impacts and security threat of indefinitely storing the additional irradiated fuel that will be generated over the anticipated 40-year operating license. Despite having already taken many decades, Yucca Mountain still faces many daunting hurdles before it could even obtain a license to begin construction. An April 2006 report from the Government Accountability Office (GAO) reaffirms the mounting challenges facing the Yucca Mountain project and reiterates the long history of quality assurance problems at the site that have led to repeated delays and increases in cost.

Even if Yucca Mountain is eventually opened, which is not anticipated before 2017 if at all, the site cannot hold the high-level radioactive waste that will be generated by existing reactors after 2010. Therefore, in addition to the waste generated by existing reactors, waste created by new reactors, such as Watts Bar Unit 2, would also have to remain onsite for an indefinite period of time. The environmental impacts of indefinite storage of highly radiotoxic nuclear waste must be thoroughly evaluated in the final SEIS.

Economics

Watts Bar was the last and one of the most expensive commercial nuclear power plants brought online in the country. TVA remains very close to exceeding its congressionally mandated debt ceiling of $30 billion. Currently, TVA has about $25 billion in debt, in addition to $3-5 billion worth of other obligations that could be considered debt (e.g. leaseback contracts, pre-purchase of electricity, etc.). The restart of Browns Ferry Unit 1 is estimated to cost a total of $1.8 billion and Tom Kilgore, TVA president and acting CEO, told the Associated Press it will cost $2-3 billion to complete Watts Bar Unit 2 reactor.[vi] Yet there was no mention of costs and TVA's debt ceiling in the DSEIS. TVA must evaluate this in the final SEIS.

Decommissioning

According to a General Accounting Office (GAO) report in 2003, all of TVA's nuclear power plants were found to be below the benchmark of sufficiency for decommissioning trust fund balances. This is extremely problematic. TVA must evaluate the decommissioning trust fund balances for both Watts Bar units and ensure that sufficient decommissioning funds would be in place in order to protect utility ratepayers and taxpayers.

Global Warming

The predicted effects of global warming in the region, such as summer heat waves or droughts, could negatively impact the ability for the existing or proposed reactors at Watts Bar to generate electricity under those conditions if the Tennessee River is impacted. This deficiency was demonstrated by the 2006 summer heat wave, when nuclear power plants in France, Germany, and across Europe, and in the U.S. at the Cook nuclear plant in Michigan, had to shut down because the water temperatures were too high to allow for safe operation. Some companies in Europe also had to secure exemptions from regulations in order to discharge overheated water into the environment and others were forced to buy electricity on the spot market. These effects also happened in the TVA region. During the summer of 2006, extreme heat forced TVA to begin interrupting power to some industrial customers for the first time since 2003. TVA also had also been forced to lower levels in its Tennessee River reservoirs to generate power and provide cooling water for plants.[vii] The DSEIS has no mention of the predicted impacts of global warming in terms of temperature and drought on the Tennessee River and how that could impact the operation of Watts Bar or the Sequoyah reactors.

Need for Power
TVA has had a history of overestimating capacity needs and the DSEIS continues that trend; the DSEIS fails to show that TVA needs the additional generating capacity by completing Watts Bar Unit 2. Furthermore, TVA's Browns Ferry Unit 1 in Alabama is scheduled to restart, after more than 20 years of being mothballed, as early as this month, May 2007. There is no mention of this new baseload generation coming online in TVA's service territory in the DSEIS. TVA should study the potential need for Watts Bar Unit 2 in light of nearly 1100 MW coming online from the Browns Ferry restart.

Additionally, TVA is currently undergoing its long-term energy plan that will provide strategic direction for TVA for the next 10 years. Consequently, the decision to pursue Watts Bar Unit 2 should be made *after* that strategic plan has been developed, *not before*.

No Analysis of Alternatives
The DSEIS does not provide a thorough review of energy alternatives or technologies. Renewable energy technologies, like bioenergy, solar, and wind, which are not likely to be targeted by terrorists nor have the capacity, in terms of accidents, to kill thousands of people or permanently contaminate large land areas, should not be ignored by TVA. Energy efficiency measures also pose no health or safety risks to the public and the TVA region has significant resources to tap in this arena.

TVA has excellent wind resources within its service area. TVA should be encouraged to invest more in developing this clean, safe energy resource instead of spending billions of more dollars on completing Unit 2. There is also potential for bioenergy production in Tennessee and TVA's service territory. Clean forms of bioenergy represent a 'homegrown' energy source that can provide local jobs to rural areas that would also support farmers and the region's economy, while helping expand clean energy technologies. The use of solar technologies and other clean energy choices were not even mentioned in the DSEIS. The final SEIS must include the analysis of alternatives.

Response 20

Water Impacts

As explained in Section 3.1.1 of the SEIS, WBN has both a primary closed condenser cooling water (CCW) system and an open loop supplemental CCW (SCCW) system. Consequently, the plant is a relatively small consumptive user of water. Water consumption is not discussed in detail in this SEIS because no change is proposed from the original design bases for the CCW and SCCW systems, which were analyzed in previous NEPA reviews. TVA's 2006 water withdrawal registration, a report sent annually to TDEC Division of Water Supply, indicates that although the plant withdrew 60,441,530 million gallons of water over a 12 month period, 55,947,680 million gallons were returned, for a total of about 4.5 million gallons consumed in one year. Additional information about the expected quantity of water to be used by the plant, the mixing zones for the various plant outfalls, and the impact of the plant withdrawals and releases under extreme low river flow (worst case) conditions have been added in Section 2.2.2 and Section 3.1.1 of the SEIS. See also Response 7. TVA environmental policy and principles requires plant operations to comply with all applicable environmental laws and regulations. Thus, as stated in the SEIS, TVA fully intends to operate the plant within current NPDES limits.

Reactor Design Vulnerabilities and Security Concerns

See SEIS Section 3.12 for analysis of these issues. WBN is an NRC-approved nuclear plant design. WBN Unit 1 has operated safely since 1996. Safety measures for two-unit operation were included in the original plant design. If an accident occurs in either unit, the other unit is taken to hot standby mode and eventually to shutdown. This assures the second unit is in a safe and stable configuration while the accident is mitigated in the other unit. Return to power of either unit would depend on the accident and the degree of recovery required to allow safe operation. As stated on page 1 of the SEIS, the proposed action does not include production of tritium in Unit 2.

High-level Radioactive Waste

As discussed in Section 3.15 of the SEIS, the environmental effects of on-site spent fuel storage were considered in the 1999 DOE EIS for Production of Tritium in a CLWR (US DOE 1999) which TVA adopted in 2000 (TVA 2000) and updated in this environmental review. See Response 24 for additional information about TVA's plans for spent fuel storage.

Economics

Additional information about the effect of WBN Unit 2 on the delivered cost of power has been added to Section 1.6 of the SEIS. TVA estimates that operation of WBN-2 would reduce the cost of power on the TVA system by an average of 3.7 percent. To further analyze the cost effectiveness of completing WBN, TVA is conducting a Detailed Scoping, Estimating, and Planning (DSEP) study. When further developed in summer 2007, the DSEP will provide a more detailed cost estimate for the completion of WBN Unit 2. TVA will use information from the DSEP and the SEIS to make a decision about whether to complete and operate WBN Unit 2.

Decommissioning

TVA complies with NRC regulations regarding the funding of future decommissioning liabilities. TVA maintains a nuclear decommissioning trust to provide money for the ultimate decommissioning of its nuclear power plants. The estimate for decommissioning costs of nuclear generating units is based on options prescribed by NRC procedures to dismantle and decontaminate the facilities to meet NRC criteria for license termination. TVA recently submitted its biannual decommissioning funding status report to the NRC in March 2007. Utilizing the NRC's guidance, the present value of the estimated future nuclear decommissioning cost for TVA's operating units as of December 31, 2006 was $699 million. The assets of the trust as of December 31, 2006, totaled $1.004 billion. The balance in the trust is greater than the present value of the estimated future nuclear decommissioning costs. Upon commencement of WBN Unit 2 operations, the decommissioning trust will be expanded to cover the eventual costs of Unit 2 decommissioning. TVA monitors the monetary value of its nuclear decommissioning trust and expects that, over the long term and before cessation of nuclear plant operations and commencement of decommissioning activities, adequate funds from investments will be available to support decommissioning.

Global Warming

See response to Water Impacts, above and Response 7.

Need For Power

Additional information has been added to Section 1.6, Need for Power. Actual TVA load-growth has tracked closely with projections made in TVA's IRP EIS. Revised Figures 1-4 and 1-5 in the SEIS compare the estimated power supply capacity of 2008 to 2013. As stated in Section 1.6, these projections include "additions that are currently being implemented such as the restart of TVA's BFN Unit 1 and the uprate of all three units at the plant, a mix of energy resource options from the portfolio of options in TVA's IRP EIS, and assumes completion of WBN Unit 2." The Strategic Plan adopted by the TVA Board on May 31, 2007 reaffirms the commitment to TVA's historic mission and broadly identifies how that mission will be achieved and establishes metrics for determining progress in doing so. It is not an "energy plan" and complements but does not replace TVA's 1996 IRP which is an energy plan.

No Analysis of Alternatives

The purpose of this SEIS is to supplement past environmental reviews concerning the construction and operation of Unit 2 for which TVA holds a valid construction permit. The SEIS tiers from TVAs IRP EIS which analyzes a wide range of energy resource options and alternatives. See Responses 3 and 4 concerning energy conservation and alternate energy sources.

Comments Supporting the Completion and Operation of WBN Unit 1

I am writing to support the Tennessee Valley Authority's proposal to complete Unit 2 at the Watts Bar Nuclear Plant located near Spring City, Tennessee. We need more Nuclear power in America.

Jack Keim
5541 Heritage Bl
Wildwood, FL 34785

I am writing to AGREE with the
Tennessee Valley Authority's proposal to complete Unit 2 at the Watts Bar Nuclear Plant located near Spring City, Tennessee.

Nuclear energy is needed to provide emission free power.

Thank you for your consideration of these comments.

M J Bender
1130 46th St
DesMoines, IA 50311

I am writing to AGREE with the Tennessee Valley Authority's proposal to complete Unit 2 at the Watts Bar Nuclear Plant located near Spring City, Tennessee.
PUBLIC CITIZEN NEEDS TO INFORM US FIRST ABOUT THE USE OF NUCLEAR POWER WORDWIDE AS WELL AS ITS SAFETY RECORD BEFORE IT RIDES ATTACKS WITH MEANINGLESS ARGUMENTS!!

Thank you for your consideration of my comments.

Gottfried Kaestner
9703 Cedarhurst Dr
Houston, TX 77096

“The risks of a beyond-design accident from operation of WBN are small. Increased risk from Unit 2 operation would be extremely low. Risk of and potential impacts from a terrorist attack on WBN are not expect [sic] to increase significantly due to completion of WBN Unit 2. Because WBN is an existing, operating nuclear facility, the risks and potential consequences of a terrorist attack already exist, and safeguards have already been taken to protect against such risks." From the TVA's environmental impact statement.”

Theodor Feibel
222 Park Avenue South, Apt 3A
New York, NY 10003

I am writing to SUPPORT the Tennessee Valley Authority’s proposal to complete Unit 2 at the Watts Bar Nuclear Plant located near Spring City, Tennessee. Recent wWildfires [sic] in the Southeast have convinced me tht [sic] our air quality requires more nuclear and less coal.

S. Michael Maffeo
4688 Savage Hills Dr.
Macon, GA 31210

I am in favor of the proposed completion of the unit 2 reactor at WBN. It will create temporary construction jobs in the area and add to the tax base for Rhea and surrounding counties. I have worked there off and on since 1980 and have always been impressed with unit 1. I recently purchased a home in the immediate area of the plant and am looking forward to finishing my few remaining years until retirement at the site. I was a site mechanical superintendent on the Browns Ferry Unit 1 Restart and look forward to contributing to this project. Any up to date information on the current status of the completion proposal that you can share would be appreciated. Thank You.

Cliff Duggan
Dayton, Tennessee

We desperately need this additional generating capacity for the growth and viability of the TVA region. When compared with other options, nuclear power has been very clean environmentally, so that this will have a positive effect on the environment versus other sources of power

Mickey Crook
Tennessee

I want to express my support for the completion of Watts Bar Unit 2 on two fronts. First, it is good for the TN Valley environmentally by eliminating air pollution that would accompany a coal fired power plant in its place. Second, it is good for the rate payers who have already paid a large percentage of the capital cost for the plant, a plant that is predominately capital cost, unlike natural gas generated electricity which is heavily reliant on volatile fuel costs.

Jerry Lichtenwalter
12453 Amberset Dr.
Knoxville, TN 37922

I have reviewed the draft supplemental impact statement for the completion of Watts Bar unit 2 and recommend that TVA proceed with completion of unit 2. I encourage TVA, and other utilities, to increase their base load capacity by expanding their nuclear generation capability wherever possible. Given the construction status of major Watts Bar unit 2 facilities, the minimal site impact resulting from unit 2 construction and the identified operational impacts as discussed in this draft statement I think there should be no hesitation in pursuing completion of this nuclear unit.

Daniel F Heagey
3512 Christenberry drive
Maryville, TN 37801

The main thrust of this letter is to agree with nuclear energy for TVA, however, to suggest the next generation of nuclear reactors used by TVA include ‘nuclear waste reprocessing/recycling’ capabilities. There was a very good segment on ‘60 Minutes’ last night, 4/7/07, concerning the importance of nuclear energy to meet future energy needs, but also the importance of ‘nuclear waster reprocessing/recycling,’ to alleviate the storage problem. Apparently, this has been done/is being done in France.

I am presently physics major at UTC with a deep interest in energy systems and related human survival. I have been intensely involved in a recycling initiative in the City of Chattanooga for the last 2 years.

I have also read the book, 'Revenge of the Gaia,' by the geophysicist, James Lovelace. In this very brilliant and enticing book Mr. Lovelace also concludes that presently nuclear energy is for now the best source for large scale human energy needs, with the necessity and need also for fusion and fission energy research.

I myself have done a bit of research in regards to a DOE internship application which I have enclosed. The article, 'Reprocessing spent nuclear fuel', is from the December '06 Physics Today journal. The article briefly outlines the efforts of the GNEP for renewed nuclear development in the future, present efforts and future projections for the 'reprocessing/recycling of nuclear waste', as opposed to nuclear water storage in Yucca Mountain.

Although I have recently purchased a block of TVA Green Energy Switch for my rental residence, I believe now that Nuclear Energy will be the main 'energy engine' for the future replacing the current 'coal engine' when coal has been diminished.

If I might share a bit of personal 'energy rationalization', which I assume TVA probably has a handle. Nuclear is capable of more 'energy generation/sq.ft,' than coal, solar and wind. It takes more land area and related 'network infrastructure' to produce energy with wind and solar than nuclear energy. Of course, the comparison to coal as an 'energy source' is daunting in regards to resource recovery (mining), transportation and networking and related equipment. I have recently viewed the DVD, 'Kilowatt Ours', and when riding my bike in Chattanooga seeing the hundreds of coal filled box cars traveling to TVA coal powered plants and returning empty to be filled again.

The logistical, financial, transportation infrastructure, social and environmental impacts of coal is astronomical compared to nuclear, not to mention coal's greenhouse emissions. As per 'Kilowatt Ours': the impacts of coal energy range from the destruction of the mountains of West Virginia, related environmental and social impact, the need for railroad tracks, railroad cars, transportation energy, etc., etc. Whereas, Nuclear is done in a comparably a small land area w/o the mass scales of networking and transportation as mentioned above.

Solar energy takes larger areas and also great amounts of networking to produce energy comparable to nuclear. Can solar produce the amount of energy in small energy generation areas needed to supply the amount of energy required by cities i.e. industrial, commercial and residential uses. Also, there are weather and climate issues/variables for sun and wind energy generation.

I do not feel wind energy is good energy. Wind has a very negative visual impact on 'outdoor/natural landscape aesthetics'. I would rather have safe, recyclable nuclear than to destroy the 'natural aesthetics of our natural environment' with wind turbines. Also, wind can be hazardous to aviary/bird patterns territory/ecosystems i.e. birds are killed by the blades of the wind turbine towers.

Biofuels have the danger of drought and other climatologically changes, also increasing food costs i.e. corn and destroying natural areas/forests to plant crops thus destroying the filtering effects of forests for carbon dioxide.

In the end probably all of sources of energy will play an important roles for human survival with other new technologies constantly being created i.e. fusion, fission. However, right now I feel 'safe, recyclable', nuclear energy will be our best source for the next 50-150 years as the 'main engine' to replace coal. Thus, I am encouraging TVA to incorporate 'reprocessing/recyclable' nuclear waste reactors.

I appreciate your time and consideration of the above concerns and ideas. Sincerely,

Frank DePinto
P.O. Box 6194
Chattanooga, TN 37401

I am very much in favor of the completion of Watts Bar Unit 2. I suffer from asthma and am also concerned about global warming. The only emissions of a nuclear reactor are water vapor and heat. Neither I nor the planet will be harmed. Adding another operating nuclear reactor will only decrease the portion of our electricity which comes from fossil fuels. I am concerned about natural gas rapidly becoming scarce. I fear that within the next decade natural gas will be too expensive to use for heating let alone electricity production. As for nuclear radiation and emissions: I have heard that coal-fired power plants release more radiation through the combustion of coal than most reactors leak into the environment. TVA, please do not build any more fossil plants. Please build more nuclear reactors and build solar thermal power stations.

Charles Sigmund Devine
404 Valparaiso Rd.
Oak Ridge, Tennessee 37830

Even if I'm in Georgia being an employee of NGEMC, I know the need for Wattsbar #2 to be put on line. TVA's need for capacity is growing more and more. We the people of the TVA Valley will need this capacity sooner than planned for. I appreciate TVA's willingness to move ahead and put Wattsbar #2 on line to provide the need in the entire Valley. Thank You for serving us.

David Creekmore
1708 Brighton Way
Dalton, Ga. 30721

Response 21

Comments noted. TVA agrees that developing and maintaining a diverse generation capacity mix is important now and in the future. Additionally, TVA plans to continue an aggressive program to reduce emissions from coal fired plants. TVA is an advocate for recycling as an integral part of managing nuclear spent fuel and to enhance the ability for nuclear to be expanded to meet the growing energy needs of the nation. TVA also believes that spent nuclear fuel can be managed safely whether or not recycling is used. There is still considerable research and demonstration that must be performed to implement a fuel recycling program that meets the U.S. requirements. TVA will continue to seek ways that can best support government and industry activities that are directed toward developing this capability. Section 3.8 of the SEIS addresses

economic benefits of completing WBN Unit 2. See Response 3 for alternative sources of energy and Response 9 for cost of power.

Agency Letters

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
WATER SUPPLY
9th Floor, 401 Church Street
Nashville, Tennessee 37243-1549
Phone: (615) 532-0191; Fax: (615) 532-0503

March 29, 2007

Mr. Bruce Yeager
TVA
WT 11B
West Summit Hill Drive
Knoxville, Tennessee 37902-1499

RE: Request for Comments, Watts Bar Nuclear Plant Unit 2 (Rhea County) Tennessee

Mr. Yeager:

The Division of Water Supply thanks you for the opportunity to provide comments on the J Watts Bar Nuclear Plant Unit 2. We have received and reviewed the Request for Comments, on the plan.

Safe Dams Program:	A file review was conducted of all registered sites in the Safe Dam Program. None were located within this proposed location. If at any time Mr. Lyle Bentley of the Division of Water Supply needs to be contacted he can be reached at Lyle.Bentley@state.tn.us or by telephone at 615-532-0154.
Wellhead Protection Program:	A file review was conducted of all registered sites in the Wellhead Protection/Source Water Protection Area Program. You will be located within the Source Water Protection Areas for Dayton Water Department. Dayton Water System should be notified of any activity that may produce any discharge to surface or ground water in that area. For additional information please contact Mr. Scotty Sorrells at scotty.sorrells@state.tn.us or by telephone at 615-532-9224.

Water Well Program:

A file review was conducted of all the registered private water wells within this proposed location. A copy of the file is attached to this letter. Please be advised that not all the water wells that are in existence are on this database and that there may be older wells that we have no record of as well as hand dug wells whose existence we would not have recorded. Please be advised that there are several springs in the area that may also be used as private water supplies. For additional information please contact Mr. Luke Ewing at luke.ewing@state.tn.us or by telephone at 615-532-0176.

Please see Attachment A for a list of wells in the area. All water wells that are encountered should be plugged and abandoned by a licensed well contractor.

Please note also that you may encounter Class V systems in the form of Large Capacity Subsurface Fluid Disposal Systems (SFDS) at various commercial businesses you may encounter. If any business along the route are being relocated or are connecting to the system that are currently using a SFDS then they should be properly plugged and abandoned.

If you have any questions, feel free to call me at (615) 532-0170 or Scotty Sorrells at (615) 532-9224.

Sincerely,

Thomas A Moss
Deputy Director
Division of Water Supply

cc: Scotty Sorrells, DWS-GWMS UIC Coordinator
Luke Ewing, DWS Manager Water Well Program
Lyle Bentley, DWS Manager Safe Dams Program

Response 22 – TDEC, Division of Water Supply

TVA appreciates the information provided by the Division of Water Supply regarding the location of area wells. As described in Chapter 2 of the SEIS, the completion of WBN Unit 2 will primarily entail work inside of existing buildings and as such no major ground disturbing activities are planned. Additionally, no

ground disturbing activities would occur outside of the existing vehicle barrier system if WBN Unit 2 were to be completed. However, in the event that a discharge to surface or ground water is planned or would occur, TVA would notify Dayton Water Department.

March 30, 2007

APR 1 0 '07
EIS
Doc. Type: Administrative
Index Field: Agency Co.
Project Name: Watts Bar
Project No.: 2006-124

TENNESSEE HISTORICAL COMMISSION
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

Mr. Jon M. Loney
Tennessee Valley Authority
400 West Summit Hill Dr.
Knoxville, Tennessee, 37902-1499

RE: TVA, WATTS BAR NUCLEAR PLANT/UNIT# 2, UNINCORPORATED, RHEA COUNTY

Dear Mr. Loney:

In response to your request, received on Monday, March 26, 2007, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicant for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800. You may wish to familiarize yourself with these procedures (Federal Register, December 12, 2000, pages 77698-77739) if you are unsure about the Section 106 process.

After considering the documents you submitted, we determine that THERE ARE NO NATIONAL REGISTER OF HISTORIC PLACES LISTED OR ELIGIBLE PROPERTIES AFFECTED BY THIS UNDERTAKING. We have made this determination either because of the specific location, scope and/or nature of your undertaking, and/or because of the size of the area of potential effect; or because no listed or eligible properties exist in the area of potential effect; or because the undertaking will not alter any characteristics of an identified eligible or listed property that qualify the property for listing in the National Register or alter such property's location, setting or use. Therefore, we have no objections to your proceeding with your undertaking.

If your agency proposes any modifications in current project plans or discovers any archaeological remains during the ground disturbance or construction phase, please contact this office to determine what further action, if any, will be necessary to comply with Section 106 of the National Historic Preservation Act. If you are applying for federal funds, license or permit, you should submit this letter as evidence of consultation under Section 106 to the appropriate federal agency, which, in turn, should contact us as required by 36 CFR 800. If you represent a federal agency, you should submit a formal determination of eligibility and effect to us for comment. You may find additional information concerning the Section 106 process and the Tennessee SHPO's documentation requirements at www.state.tn.us/environment/hist/sect106.shtm. You may direct questions or comments to Joe Garrison (615) 532-1550-103. This office appreciates your cooperation.

Sincerely,

Richard G. Tune
Deputy State Historic
Preservation Officer

RGT/jyg

Response 23 – Tennessee Historical Commission
Comment noted.

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
DIVISION OF AIR POLLUTION CONTROL
9TH FLOOR, L & C ANNEX
401 CHURCH STREET
NASHVILLE, TN 37243-1531

April 3, 2007

APR 3 0 2007
Doc. Type: EIS - Administrative Record
Index Field: Agency Comment
Project Name: Watts Bar Nuclear Plant Unit 2
Project No.: 2006-124

Mr. Mr. Jon M. Loney
Senior Manager, NEPA Policy
Tennessee Valley Authority
400 Summit Hill Drive
Knoxville, TN 37902-1499

Dear Mr. Loney:

I have reviewed the Tennessee Valley Authority's draft supplemental Environmental Impact Statement for the completion and operation of Watts Bar Nuclear Plant *Unit 2* in Rhea County, Tennessee.

Since the construction and operation of this unit will occur inside existing buildings, it appears the only impact this project may have on air quality, with respect to Tennessee Air Pollution Control Regulations, is the possible disturbance of asbestos containing material(s). If there are asbestos materials that may be disturbed during this project, procedures set forth in Chapter 1200-3-11-.02 must be followed.

Thank you for allowing me the opportunity to comment on this environmental impact statement.

Sincerely,

Barry R. Stephens, P.E.
Director

Response 24 – TDEC, Division of Air Pollution Control
Comment noted. Some construction activities, including the staging of materials, will occur outside of buildings but any air quality impacts associated with these activities are expected to be short term and insignificant.

United States Department of the Interior
OFFICE OF THE SECRETARY
OFFICE OF ENVIRONMENTAL POLICY AND COMPLIANCE
Richard B. Russell Federal Building
75 Spring Street, S.W.
Atlanta, Georgia 30303

ER 07/0279
9043.1

May 7, 2007

Mr. Bruce Yeager
Tennessee Valley Authority
WT 11B, 400 West Summit Hill Drive
Knoxville, Tennessee 37902-1401

RE: Tennessee Valley Authority (TVA) Draft Supplemental Environmental Impact Statement (SEIS) – Completion and Operation of Watts Bar Nuclear Plant Unit 2, Rhea County, Tennessee

Dear Mr. Yeager:

The Department of the Interior (Department) has reviewed the referenced draft SEIS and offers the following comments.

The Cookeville Ecological Services Field Office of the U.S. Fish and Wildlife Service has been actively involved with TVA and others in reviewing operations at the Watts Bar Nuclear Plant. Although Watts Bar Nuclear Plant Unit 2 was not constructed, formal consultation under Section 7 of the Endangered Species Act was completed for the operation of both Unit 1 and Unit 2 on March 8, 1995. Many of the conservation recommendations for the federally endangered pink mucket (*Lampsilis abrupta*), dromedary pearlymussel (*Dromus dromas*), rough pigtoe (*Pleurobema plenum*), fanshell (*Cyprogenia stegaria*), and the federally threatened snail darter (*Percina tanasi*) and bald eagle (*Haliaeetus leucocephalus*) contained within the Biological Opinion for the operation of Unit 1 have not been implemented by TVA. These conservation measures were discretionary; however, their implementation would have provided positive environmental benefits to the federally listed species covered in the Biological Opinion.

Although current macro invertebrate and fish community structure data are provided in the appendices of the draft SEIS, other aquatic data for Unionid mussels, juvenile fish, and fish larvae are over 10 years old. We recommend that mussel surveys be conducted within the mussel relocation zone (MRZ) and the State-designated mussel sanctuary between Tennessee River mile points 520.0 and 529.9. This current data should be presented in the final SEIS for the proposed operation of Watts Bar Nuclear Plant Unit 2. Our existing data suggest that the mussel populations in the tail water reach of the river below Watts Bar Dam may be in serious decline. Definitive data regarding the health of mussel populations within this reach are needed

to adequately evaluate the potential effects of current operations associated with Unit 1 and the proposed operation of Unit 2.

In 2000, TVA created a boulder field in the Watts Bar tail water to provide enhanced habitat for mussels and to compare sheltered habitats below other TVA projects on the Tennessee River. In part, this experiment was implemented because of previous assessments suggesting juvenile mussel recruitment was poor in the tail water below Watts Bar Dam. We are not aware that TVA evaluated the success of this project and we have not received reports from mussel surveys conducted in this reach of the tail water.

Entrainment data presented in the draft SEIS is also over 10 years old. We suggest that additional juvenile fish and fish larvae surveys be conducted in the affected reach of the Tennessee River. TVA should also model projected water withdrawal rate increases associated with the operation of Unit 2 and the potential for entrainment of larval and juvenile fish species. A commitment by TVA to conduct actual entrainment studies after the initiation of operations at Unit 2 to validate these model assumptions would provide valuable data for the Department to assess potential environmental effects associated with the operation of both units. It would also be beneficial to conduct additional surveys for the threatened snail darter within the reach of the Tennessee River affected by operations of the Watts Bar Nuclear Plant to verify the current spatial distribution of this species.

In the 1995 Biological Opinion, the potential for adverse effects associated with chemicals used in normal operations was addressed. These chemicals included alum, sulfuric acid, sodium hydroxide, chloride, boric acid, metallic salts, carbonates, ammonia, hydrazine, copper, nickel, pyrophosphate, zinc sulfate, coppertrol, clamtrol, bromo-chloro-hydantoin, and organic co-polymer dispersants. Many of the chemicals proposed for use in 1995 may not be in use in current facility operations and the proposed operation of Unit 2. Additional data and discussion of proposed chemical use at the facility are warranted in the final SEIS. This should include a description of the specific constituents associated with trade name or proprietary chemical compounds proposed for use, their projected concentrations in plant effluents, and copies of current National Pollution Discharge Elimination System (NPDES) permits issued for the facility.

Existing U.S. Environmental Protection Agency (EPA) Water Quality Criteria established in the 1999 Update of Ambient Water Quality Criteria for Ammonia (USEPA 1999) were not utilized for all outfalls in the original and subsequent modifications to, or re-issuances of, the NPDES permit for Watts Bar Unit 1. These 1999 criteria (i.e., CCC of 2.16 mg/l and CMC of 19.6 mg/l) were proposed for surface waters with a pH of 7.51 SU and a temperature of 25.28°C. Our recent research indicates that sensitive Unionid mussels and fish species are susceptible to these ammonia levels. Glochidial and juvenile mussel toxicity tests have been conducted with 9 species, including 2 federally listed species. We recommended an alternative chronic criterion in the range of 0.3 to 0.7 mg/l total ammonia as nitrogen at a pH of 8 SU. In addition, we recommend that TVA fully evaluate potential ammonia concentrations in all effluents discharged from the facility as well as in-stream concentrations in this reach of the river.

Under provisions of the Endangered Species Act, TVA should assess potential effects and determine if the operation of Unit 2 may affect one or more of the above-mentioned federally listed species. A copy of the TVA assessment and findings should be submitted to the Fish and Wildlife Service, Cookeville Field Office for review and concurrence.

If you have any questions concerning these comments, please contact Steve Alexander of the Cookeville field office at (931) 528-6481 ext. 210 or via e-mail at steven_alexander@fws.gov.

Sincerely,

Gregory Hogue
Regional Environmental Officer

cc:
FWS – Region IV
FWS – Cookeville Field Office
OEPC – Wash

Response 25 – DOI

Although old, the existing data indicate the mussel populations adjacent to Watts Bar Dam is in decline. However, TVA determined that the proposed action would not affect mussels in the reservoir. As indicated in the SEIS, Watts Bar Unit 2 would operate within the parameters of the existing NPDES permit. No new intake or outfall structures would be built. The current plan is to supply supplementary cooling water to both Unit 1 and Unit 2. Whatever the final configuration, the arrangement of the SCCW system will be adapted so that the amount of water and heat released by the plant through Outfalls 101, 102, and 113 will not be significantly different from the current design bases for these outfalls.

As the Department of Interior (DOI) indicated, TVA did provide enhanced habitat for mussels by placing a boulder field in the Watts Bar Dam tailwater (upper Chickamauga Reservoir) in 2000. This project was also considered by the USFWS as providing benefits to the federally listed mussels in adjacent Watts Bar Reservoir. After placing the boulder field in the reservoir in 2000, TVA evaluated the success of the project in 2001 and prepared a report.
TVA will provide this report to DOI and the Cookeville office of the USFWS under separate cover.

The potential for entrainment and impingement of larval, juvenile and adult fishes associated with water withdrawal at the intake pumping station (IPS) near outfall 101 is not expected to be significant because the WBN condenser cooling water system (CCW) is basically with a closed cycle cooling system. In addition, important species spawning areas in Watts Bar and Chickamauga Reservoirs are not located in areas that could be affected by water withdrawals at this IPS.

Three forms of ammonia (ammonia, ETA, and hydrazine) are injected into the condensate system in the WBN Turbine Building. Ammonia and ETA are injected through the same feed line while hydrazine has a separate feedline into the condensate system. Ammonia is added to raise the pH of the water to 9.8 SU. ETA is added to keep the pH elevated in certain portions of the condensate feedwater system. Hydrazine is added to scavenge dissolved oxygen (DO) in the condensate feedwater system. The combined effect of these chemical injections is to reduce corrosion in the condensate and feedwater systems. Additional information about chemical additions to raw water at WBN have been added to Section 3.1.2.

While a majority of the condensate/feedwater flow is converted to steam, approximately 70 gpm (0.156 cfs) is discharged as steam generator blowdown (SGBD). The maximum SGBD effluent flow is 262 gpm (0.584 cfs) for the existing Unit 1 and also for the proposed Unit 2. SGBD is normally routed to the CTBD line with a normal flow of 25,000 gpm (55.7 cfs), which in turn is discharged through the diffusers at Outfall 101. However, a minimum flowrate of 3500 cfs (1,570,909 gpm) from Watts Bar Hydro Dam per the WBN NPDES permit for allowable discharges must be available for the diffusers to discharge into the river. Should this minimum flow not be available, the diffusers are isolated and the CTBD and SGBD discharges are diverted to the yard holding pond (YHP) unless the SGBD has already been diverted to the condensate system. See Section 3.1.1 for more details.

The mean background ammonia concentration for TRM 527.9, from historical data is 0.1 mg/l. Historical data from the past two years, shows the maximum ammonia concentration in the SGBD to be 4.2 mg/l (or 4.2 ppm) at a 78 gpm (0.174 cfs) flowrate. For Watts Bar Unit 2 SGBD, TVA would expect similar flowrates and ammonia concentrations as Unit 1. Unit 2 SGBD would be mixed with the Unit 1 SGBD for a total maximum flow of 524 gpm (1167 cfs). For a worst-case scenario, the river minimum flow rate of 3500 cfs (1,570,909 gpm) would result in a dilution factor 1:2999 (assuming full mixing prior to reaching the bottom) without the benefit of any CTBD flow. Therefore, the total ammonia concentration leaving WBN diffusers into the Tennessee River would be well below endpoints indicated in recent mussel toxicity studies, including those scheduled for publication in 2007. Under Section 7 of the Endangered Species Act (ESA), there would be no effect to any threatened and endangered species or their habitat.

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 4
ATLANTA FEDERAL CENTER
61 FORSYTH STREET
ATLANTA, GEORGIA 30303-8960

May 14, 2007

Ms. Ruth M. Horton
Tennessee Valley Authority
400 W. Summit Hill Drive, WT 11D-K
Knoxville, TN 37902

RE: EPA Review and Comments on
Draft Supplemental Environmental Impact Statement (DSEIS)
Completion and Operation of
Watts Bar Nuclear Plant Unit 2
CEQ No. 20070113

Dear Ms. Horton:

The U. S. Environmental Protection Agency (EPA), Region 4, reviewed the Draft Supplemental Environmental Impact Statement (DSEIS), pursuant to Section 309 of the Clean Air Act and Section 102 (2)(C) of the National Environmental Policy Act (NEPA). The purpose of this letter is to provide the Tennessee Valley Authority (TVA) with EPA's comments regarding potential impacts of the completion and operation of the Watts Bar Nuclear Plant Unit 2.

The proposed action of completing and operating the Watts Bar Nuclear plant Unit 2 would provide additional baseload capacity, and maximize the use of existing assets. The facility uses intakes from the Tennessee River for plant cooling, and discharges wastewater via three outfalls to the Tennessee River.

Based on EPA's review of the DSEIS, the project received an "EC-1" rating, meaning that environmental concerns exist. Specifically, protecting the environment involves the continuing need for appropriate storage and ultimate disposition of radioactive wastes generated on-site, as well as continuing measures to limit bioentrainment and other impacts to aquatic species from surface water withdrawals and discharges, and compliance with the NPDES Permit.

The National Pollutant Discharge Elimination System (NPDES) Permit Program authorizes the discharge of pollutants from certain facilities to waters of the United States. Administration of the NPDES permit program in Tennessee is delegated by EPA to the Tennessee Division of Water Pollution Control. The Watts Bar Nuclear Plant has an NPDES Permit issued by the Division of Water Pollution Control. The NPDES Permit limits specific pollutant discharges from the plant, requires monitoring of discharges, and regulates the flow and thermal impacts of discharges. The NPDES permittee has operated and is operating in compliance with the NPDES permit requirements.

The DSEIS acknowledges that continuing radiological monitoring of all plant effluents and appropriate storage of spent fuel assemblies and radioactive wastes on-site is required for this project. Ultimately, long-term radioactive waste disposition will require transportation of wastes to a permitted repository site. In particular, please address the following concerns in the FSEIS:

- Solid Radioactive Wastes (page 81): The shipping arrangements for Unit 2 after 2008 appear uncertain with Barnwell's closing. Please provide more information on the availability and disposal costs options for Clive, Utah facility, Sequoyah Nuclear Plant or other disposition options under consideration.

- Spent Fuel Storage (page 83): Clarify whether the referenced dry cask facility is being processed as a definite project with funding to construct it. Is Unit 2 operation contingent on this facility being constructed? Clarify where the current Unit 1 spent fuel is being stored. Does the capacity for this new facility consider the contingency of Yucca Mountain being indefinitely postponed? Is the data in Table 3-24 in addition to the data given for Unit 1, or the cumulative dimensions, capacity, etc.?

In conclusion, the DSEIS is clearly written and provides useful information for assessment of the proposal to finish and operate Unit 2. However, clarification is needed regarding radioactive waste disposition after 2008 and TVA's proposed Dry Cask storage plans. Thank you for the opportunity to comment on this document. We look forward to reviewing the FSEIS. If we can be of further assistance, please contact Ramona McConney of my staff at (404) 562-9615.

Sincerely,

Heinz J. Mueller, Chief
NEPA Program Office

Response 26 – USEPA

As discussed in Section 3.14, NRC approved a Sequoyah license amendment in June 2000 to allow storage of Watts Bar solid radioactive waste at Sequoyah. This option is available to TVA after the expected close of the Barnwell facility in June 2008. Sequoyah has sufficient onsite storage capacity to handle Class B/C containerized waste from Sequoyah and Watts Bar for at least 40 years. The Clive, Utah site is the TVA preferred option for Class A waste disposal. The cost values for radioactive waste disposal are considered business confidential.

Management of spent fuel is discussed in Section 3.15. There is no current project for dry cask storage at WBN. All spent fuel generated to date from operation of Unit 1 is currently being stored underwater in the spent fuel storage pool which has a usable fuel assembly storage capacity of 1363 storage cells. This was designed to be shared by Unit 1 and Unit 2. The need for storage capacity beyond what is currently available in the existing Spent Fuel Pool (SFP) is estimated to be 10 years away (2018) for single unit operation. Additional storage capacity to support single-unit operation is therefore expected to be

needed. If Unit 2 is completed and operation commences, the need for additional storage will be accelerated to around 2015. See SEIS Section 3.15 for a discussion of the potential impacts.

The spent fuel assembly storage requirement values provided in the SEIS Table 3-25 do not credit any off-site shipment to Yucca Mountain or any other interim storage or spent fuel processing facility. The values provided are based on storing all spent fuel generated by operation of Unit 1and Unit 2 in the spent fuel storage pool and at an on-site dry cask storage facility.

See Sections 3.1 and 3.2 for information about water withdrawals, water quality, and potential impacts on aquatic ecology. Additional information about the water balance has been provided. See also the Response to Comment No. 27.

STATE OF TENNESSEE
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
401 CHURCH STREET
L & C ANNEX 6TH FLOOR
NASHVILLE TN 37243

May 14, 2007

Ms Ruth M. Horton
Senior NEPA Specialist
Tennessee Valley Authority
400W. Summit Hill Drive, WT 11D-K
Knoxville, TN 37902

Subject: **Response to Intergovernmental Review of Draft Supplemental Environmental Impact Statement (DSEIS), Completion and Operation of Watts Bar Nuclear Plant Unit 2. Spring City, Rhea County, Tennessee; and current Unit 1 NPDES Permit No. TN0020168**

Dear Ms. Horton:

The Tennessee Department of Environment and Conservation, Division of Water Pollution Control acknowledges the receipt of a copy of the Draft Supplemental Environmental Impact Statement (DSEIS), Completion and Operation of Watts Bar Nuclear Plant Unit 2, Spring City, Rhea County, Tennessee in our office on May 3, 2007. As you know, the Division is involved with TVA-Watts Bar Nuclear Unit 1 by way of issuing the NPDES permit, number TN0020168 Unit 2 discharges would also be regulated under this permit. We thank you for the opportunity to review the DSEIS and submit our comments.

The DSEIS initiates some major concerns for the division as it relates to the NPDES permitting program. As such, the division requests further discussions with TVA about the proposed re-start of construction and completion of WBN-Unit 2. Some specific items TDEC-DWPC would like to discuss with TVA are listed below:

1. The Division requests more detail of the SCCW reconfiguration addressing operation of Unit 2. The current report only reviews the operations of Unit 1. This is of concern for the Division relative to the protection of the receiving stream from thermal pollution and chemical toxicity.
2. Our review of the report leaves questions regarding the simultaneous operation of Unit 1 and Unit 2, and any changes in the volume of cooling water delivered to the condensers, and the heat load discharged to the Tennessee River. (Pg.30). We request more detailed data including modeling of the thermal mixing of the cooling water discharge under anticipated critical low flow and worst case conditions.
3. We are not certain how the Division will be informed, during extreme temperature events, when Outfall 113 effluent is blended with SCCW water or the SCCW is shut down to reduce Outfall 113 effluent temperature? (Pg.33)

4. Water intake quantity is estimated to increase by 33% from the Tennessee River. Current low flow conditions are being closely monitored by TVA River Operations because of drought conditions within the watershed. TDEC has concerns that there may still be impacts with respect to the State Mussel Sanctuary with continued low flow conditions.
5. TVA WBN Unit 1 manages its chemical additives program via a "Biocides/Chemical Treatment Plan" (B/CTP) in conjunction with its NPDES permit. The DSEIS indicates estimates of a 33% increase of chemical additives to the cooling and other water systems when Unit 2 is brought on line. Of great concern is the estimate of 100% more Towerbrom being added to the cooling tower coolant systems. TDEC needs assurances that this increase in biocide use will not result in acute or chronic toxicity in the Tennessee River. Information on maximum concentration of biocides to be discharged should be provided as well as data on the anticipated horizontal and vertical concentration profiles expected in the mixing zone in the Tennessee River. Modeling of the discharge seems appropriate for this purpose. Additional monitoring of chemical additives shall be included in the NPDES permit when new systems are put into service to determine the correlation between modeling and actual operations.
6. Comments were included in reference to the EPA 316(b) Rule that was recently remanded back to EPA by the Second U.S. Circuit Court of Appeals. See Riverkeeper, Inc., v. EPA, No.04-6692, (2d Cir. Jan. 25, 2007). This specifically relates to the SCCW screen systems. TVA indicates there will be no change in velocity of flow through this system when Unit 2 is also on line. This needs to be explained. Note that until further notice from EPA, the Division must draft the new NPDES permit with conditions under section 316(b) of the Clean Water Act that are developed on a Best Professional Judgment (BPJ) basis.
7. The Division expects to review annual reports that have been required in the NPDES permit for Unit 1 to verify TVA's statement of: "No impact, thermally, or chemically, [is] expected due to the increased flow and chemical additions to Unit 2."
8. Page 28 of the report uses the statement: "Outfall 102 includes *unregulated*, emergency overflow..." (Sentence enhanced for emphasis.) The Division is concerned with this statement because Outfall 102 has an extensive list of "regulated" parameters for the discharge from this outfall in the current NPDES permit for WBN Unit 1. If there are additional waste streams not currently listed the Division must be notified immediately.
9. Page 28. With respect to river temperature and required river flow (volume must be at least 3,500 cfs), Outfall 113 is regulated for its releases just as are Outfall 101 and 102 releases. The last sentence of page 28 should be revised to indicate this or be struck from the DSEIS.
10. Page 29, Table 3-1. Outfall 101 "Duration" should be Daily "Maximum", not "Average". Same with Outfall 102. Also, in the Notes; #1. "Downstream end" should be referred to as "Downstream Edge". Refer to current NPDES permit for consistency.
11. (Pg.37) – TDEC is under the impression that TVA will conduct on-going studies into the cumulative effects of effluent discharges from the operation of Units 1 and 2.

12. (Section 3.1.3 (Pg.42)) – Is there potential for residual tritium in soil from recent spills, to be transported to waters of the state during Unit 2 construction?
13. Does TVA anticipate an increase to the passive and/or active mixing zones in the TN. River upon operation of Unit 2?
14. TDEC- is concerned that no additional assessment or reassessment of dosage to terrestrial vertebrates was included in the report. The last assessment conducted on this was 1972 (there have been multiple tritium releases since that time.)
15. Also, on Pg.43-44, TVA states that the area between WB Dam and WBN is not an area of significant spawning activity for sauger, smallmouth, white bass, or yellow perch. The Division disagrees with this comment and believes the previous assessments of this area as being a Sauger hotspot.

If you have questions, please contact the Division at 1-888-891-TDEC; or, at this office, please contact Ms. Pamala Myers at (615) 532-0654 or by E-mail at *Pamala.Myers@state.tn.us*.

Sincerely:

Edward M. Polk, Jr., P.E.
Manager Permit Section

EMP/prm/ped

cc: DWPC: Permit Section, Enforcement & Compliance, and Chattanooga Environmental Field Office
Ms. Karrie-Jo Robinson -Shell, EPA Region IV, Sam Nunn Atlanta Federal Center, NPDES Permit Section, 61 Forsyth Street SW, Atlanta, GA 30303

Response 27 – TDEC, Division of Water Pollution Control, Permit Section
TVA met with TDEC Water Pollution Control staff in Nashville on May 24, 2007, to discuss the questions and issues raised in this letter. The meeting focused on providing information about the current condenser cooling water systems and the in-flows and discharges of water from one unit versus two-unit operation.

1. *The impacts of the combined operation of Unit 1 and Unit 2 are discussed in Section 3.1.1. The current plan is to supply supplemental cooling water to both Unit 1 and Unit 2 CCS systems. The SEIS analysis assumes the SCCW system would serve solely to Unit 2 while Unit 1 was also operating as a way of bounding the potential hydrothermal impact on the Tennessee River. Regardless of the final configuration, the arrangement of the SCCW system will be adapted so that the amount of water and heat released by the plant*

through Outfalls 101, 102, and 113 will not be significantly different from the current design bases for these outfalls. Text has been added in Section 3.1.1 to clarify this,,and data for the design flows for the outfalls have been added in Section 2.2.2. The results of the updated hydrothermal analyses show that for a typical arrangement wherein the SCCW serves Unit 2, the amount of water and heat released through each outfall with both WBN units in service can be successfully managed within the current NPDES limits. For chemical toxicity, the impacts of proposed changes in additives to raw water are discussed in Section 3.2. Information about other chemicals used at the plant has been added to Section 3.2.

2. *TVA has updated Figure 2-1 and Figure 2-2 to better illustrate the paths of flow entering and exiting the plant for the current configuration of the SCCW system. In both the current configuration and modified configuration (yet to be determined), the inflows from the SCCW system and the intake pumping station would be mixed in one or both of the cooling tower basins after passing through the condensers for Unit 1 and Unit 2. The control structures for releasing the heated effluent from the cooling tower basins by the blowdown system (Outfalls 101 and 102) and by the SCCW system (Outfall 113) will be sized to preserve the current design capacities of these systems. Additional details have been added in Section 3.1.1 for modeling of the effluent plumes from the outfalls, mixing zones, and anticipated critical low flow and worst case conditions.*

3. *The monthly discharge monitoring report (DMR) currently indicates when the SCCW is removed from service (zero discharge), and this reporting would continue. The SCCW system is rarely removed from service (e.g., major plant maintenance outages), and hydro releases from Watts Bar Dam are usually scheduled to ensure that SCCW releases can safely be made without opening the bypass conduit. In general, the temperature reporting requirements specified in the NPDES permit confirm the safe operation of the SCCW system whether it is operated with or without the bypass in service (i.e., blending). Operation of the SCCW system is not expected to increase if WBN Unit 2 is completed.*

4. *Additional information about the impact of WBN for low river flow conditions has been added in Section 3.1.1 of the SEIS. Potential Impacts to mussel species associated with the proposed action are addressed in Section 3.4.1. Even in extreme low flow conditions, TVA is required to provide a release of at least 3500 cfs from Watts Bar Dam to support the operation of Outfalls 101, 102, and 113. The current NPDES permit also requires monitoring of bottom temperature at Outfall 113. If bottom temperature encroaches on the NPDES limit (33.5°C), the SCCW system would be removed from service. 1.*

5. *Additional information about chemical treatment process at WBN has been added to Section 3.1.2. See response to TDEC comment number 2 for an explanation of the intake and effluent flows. Also see Response 25.*

6. *Edits have been made to Section 3.1 of the SEIS to clarify that intake and discharge flows for the SCCW would not increase if Unit 2 were to be completed. The SCCW may be reconfigured for use by Unit 2 to enable*

supplemental cooling water to be shared by both units, but there currently are no plans to increase the flow capacity of the SCCW system beyond the original design basis.

7. *Comment noted.*

8. *TVA recognizes that the term unregulated is inappropriate to describe the flow from Outfall 102 and has made the appropriate revision in Section 3.1.1.*

9. *TVA has made the appropriate changes in Section 3.1.1 to reflect the river flow requirements for Outfall 113.*

10. *TVA has made the appropriate changes in Section 3.1.1 to be consistent with language in the NPDES permit.*

11. *TVA's ongoing Vital Signs Monitoring Program would assess effects on fish and benthic macroinvertebrate communities and demonstrate if a balanced indigenous population is maintained. This monitoring is expected to identify any additional effects associated with operating WBN-2. Additional monitoring would be conducted if the Reservoir Fish Assemblage and Benthic Macroinvertebrate Index scores fell below 6 points, provide more information about effects on populations of recreationally or commercially important species.*

12. *There is no potential for the completion of Unit 2 to increase or affect the transport of residual tritium in soil to the waters of the state. No ground disturbing activities are planned near soils with residual tritium.*

13. *No. New text has been added to Section 3.1.1 to clarify that TVA does not expect an increase to the passive and/or active mixing zones with the completion and startup of Unit 2.*

14. *The potential for radiological effects to humans and animals in the food chain, including milk cows, is discussed in Section 3.13. As noted in the introduction to that section, this analysis was updated in 1995 and again for this SEIS. The SEIS includes revised dose values based on newer meteorological and population data.*

15. *TVA agrees that the area between Watts Bar dam and WBN is an acknowledged "sauger hotspot", that is, a good place to fish for sauger. However, TVA surveys have determined that this is not a good spawning area—the sauger prefer to spawn further downstream. Section 3.2 has been edited to indicate that the river reach adjacent to WBN is a staging area for sauger.*

DEPARTMENT OF THE ARMY
NASHVILLE DISTRICT, CORPS OF ENGINEERS
3701 Bell Road
NASHVILLE, TENNESSEE 37214-2660

MAY 21 2007

Doc. Type:
Index Field:
Project Name:
Project No.:

REPLY TO
ATTENTION OF:

May 14, 2007

Regulatory Branch

SUBJECT: Intergovernmental Review - Draft Supplemental Environmental Impact Statement (DSEIS) for Completion and Operation of Watts Bar Nuclear Plant Unit 2 in Rhea County, Tennessee

Mr. Jon M. Loney
Senior Manager, NEPA Policy
Tennessee Valley Authority
400 West Summit Hill Drive
Knoxville, Tennessee 37902-1499

Dear Mr. Loney:

This is in response to your March 22, 2007, letter requesting comments on the subject proposal.

We have reviewed the March 2007 DSEIS submitted with your letter. Based on our review, we understand that the proposed work would not require the discharge of dredged or fill material into waters of the United States (including wetlands). In this regard, a Department of the Army permit would not be required.

Thank you for the opportunity to review and comment on this matter. If you have any questions, please contact me at the above address, telephone (615) 369-7508, or e-mail at william.l.james@lrn02.usace.army.mil.

Sincerely,

William L. James
Chief, Eastern Regulatory Section
Operations Division

Response 28 – Nashville District, Corps of Engineers
Comment noted.

Attachment A

Commenters Who E-mailed the Form Letter to TVA

A. Bonvouloir
Sunnyvale, CA 94086

A. Paluska
Long Beach, CA 90803

Aaron Hudson
Westminster, CO 80030

Aaron Manire
Brookline, MA 02446

Adele Eisenstein
New York, NY 10009

Adrienne Hudson
Fort White, FL 32038

Al Giles
Austin, TX 78749

Al Perreault
Framingham, MA 01701

Alyce Hetherington
Stuart, FL 34994

Amanda Scuder
New York, NY 10019

Amalia Vidas
Phoenix, AZ 85006

Amber Vann
Live Oak, FL 32060

Andrew Wolniak
New Haven, CT 06515

Andy Tomsky
San Diego, CA 92138

Annette Cullipher
Balsam Grove, NC 28708

Annie Laurie
Dracut, MA 01826

Anthony Montapert
North Hollywood, CA 91602

Anthony Martin Dambrosi
Middletown, NY

Anthony State
Louisville, KY

Arlene Encell
Los Angeles, CA

Alan Somers
Williamsburg, VA 23185

Alex Won
San Francisco, CA 94104

Alan Wojtalik
Parkville, MD 21234

Alex Balboa
Bel Air, MD 21015

Alan Stout
Evanston, IL 60201

Alfred S. Fuller
Santa Fe, NM 87505

Alice Bartholomew
Elmira, NY 14905

Alice Deich
Ridgefield Park, NJ

Andrea Keith
Santa Ana, CA 92701

Ann Schafer
Piedmont, CA 94610

Andreia Shotwell
Wheat Ridge, CO 80033

Andrew Bertuglia
Durham, CT 06422

Alice Dugar
Independence, OH 44131

Ada S. Ann
Cameron Park, CA 95682

Arthur Swers
Floyd, VA 24091

Ava Thiesen
North Fork, CA 93643

B. Thiele
Glenview, IL 60025

B. L. Melton
Orange, TX

Barbara and Jim Dale
Decorah, IA

Barbara Brodbeck
Palm Beach Gardens, FL

Allison Hart
Westbrook, ME 04092

Alicia deHerrera
Los Lunas, NM 87031

Alicia Witt
Cincinnati, OH 45208

Alison Moski
Durham, CT 06422

Allan Post
Pacifica, CA 94044

Allen Brooks
Austin, TX 78746

Allie Bohm
Hastings-on-Hudson, NY

Angela Polaco
Henderson, NV 89011

Anna Przychodzki
Brampton, ON L6V 2B

Angie Hughes
St. Albans, WV 25177

Ania Serafin
Fort Collins, CO 80521

Amelia Caruso
Dundee, OR 97115

Amre Klimchak
Brooklyn, NY 11212

Barbara Macdonald
Woodacre, CA 94973

Barbara Moss
Marietta, GA 30068

Barbara Tetro
New York, NY 10029

Becky Marek
Austin, TX 78736

Belle Metelits
Mc Lean, VA

Bernard Saftner
Pittsburgh, PA

Bernard Berger
Kailua Kona, HI

Amy Lippert
Martinez, CA 94553

Anca Vlasopolos
Grosse Pointe, MI 48230

Ann Thomas
Kendall Park, NJ 08824

Anne Foster
Lopez Island, WA 98261

Ann Trenton
Arlington, TX 76016

Anna Ellis
Dover, MA 02030

Anne DeMers
Crookston, MN 58369

Anne Henry
St. Peters, MO 63376

Anne Lewis
Lexington, KY 40503

Annette Bailey
Syracuse, NY 13203

Barbara E. Ewing
Las Vegas, NV 89119

Andrew Cohen
Memphis, TN 38104

Andrew Jones
Gladstone, MI 49837

Brian Napier
Concord, NH 03301

Barbara Fry
Alton, IL 62002

Bernard Wolf
Denver, CO 80211

Bernardine Greene
Succasunna, NJ 07876

Bob Hebrank
Burgaw, NC

Beverly Nelmes
St. Petersburg, FL

Bob Thomas
Myrtle Creek, OR

Arran Thomson
Portland, OR

Art Hanson
Lansing, MI

Anita Knight
St. Petersburg , FL

Anita Das
Seattle, WA

Anita Lock
Oberlin, OH

Betsy Lambert
Long Beach, CA 90814

Betty Barrett
Federal Way, WA 98003

Betty Combs
Londonderry, OH 45647

Brenda Williams
Indian Harbour Beach, FL

Brian Lynch
Waterville, ME 04901

Brendan Hughes
Ridgecrest, CA 93555

Brent Remington
Topeka, KS 66605

Brent Rocks
Portland, OR 97201

Bill Copeland
Sanford, FL 32773

Bill Nierstedt
Garwood, NJ 07027

Brian Runyan
Round Rock, TX 78664

Bonnie Glasgow
Dallas, TX 75205

Brock J Vinton II
Wilmington, DE 19803

Charlotte Duncan
Bristol, TN 37620

Chad Armknecht
Palos Hills, IL 60465

Charleen Moore
Evansville, IN 47711

Charlene Woody
Callaway, MD 20620

Barbara Cowan
Cambridge, MA

Bernie & Marcia Altman
Kelso, WA

Ben Kjelshus
Kansas City, MO

Bernard Haley Jr.
Rutland, VT

Barbara Janeway
Carrboro, NC

Bruce Blacknight
Marshall, NC 28753

Bruce Katin-Borland
Croton-on-Hudson, NY

Callie Riley
Citrus Heights, CA 95610

Carl Abrahamson
Rock Rapids, IA 51246

Carolynn Griffith
Honolulu, HI 96825

Carrie Schudda
Oregon, WI 53575

Bonnie Neidlinger
McKinney, TX 75069

Carroll Arkema
Pompton Lakes, NJ

Carmen Druke
Houston, TX 77019

Carol Crocca
Rochester, NY 14625

Carol Carson
Brooklyn, NY 11220

Carol Frechette
Shakopee, MN 55379

Carol Hartzell
Hudson, IL 61748

Charles Irving
Los Angeles, CA 90034

Charlie Williams
Holland, MI 49423

Charlotte Eyre
Thief River Falls, MN

Charlotte Rose
Providence, RI 02912

Bernard L. Sater
Strongsville, OH

Bettye Whipp
Bridge City, TX

Beverly Smith
Cottonwood, AZ

Bob Clark
St Joseph, MI

Carol Horowitz
Los Angeles, CA

Carol Jean Thatcher
Chico, CA 95926

Celia Bucci
Chicago, IL 60622

Carlos Nunez
Los Angeles, CA 90004

Carol McGrath
Coatesville, PA 19320

Cassy Stone
Dixon, IL 61021

Carol McRae
Delray Beach, FL 33483

Carol Newton
Los Angeles, CA 90027

Carol Peterson
Lakeland, FL 33803

Carol Roberto
Cincinnati, OH 45255

Carole Plourde
Amesbury, MA 01913

Carolyn Douglas
Richmond, VA 23234

Chip Henneman
Draper, UT 84020

Cliff Clusin
Longmont, CO 80501

Christine Garcia
Walnut Creek, CA 94596

Christine Georgiou
Bronx, NY 10461

Connie Golden
Bellevue, NE 68005

Corinne Di Stephan
Jamaica, NY 11432

Bonnie Benard
Berkeley, CA

Bonnie Faith-Smith
Cambridge, MA

Bettemae Johnson
Albuquerque, NM

Bernie Dolezal
South Bend, IN

Beth Longnecker
El Paso, TX

Charles Dineen
Lawton, MI 49065

Charles Freeman
Woodway, TX 76712

Charles Barrett
Kent, WA 98031

Cath Haftings
Omaha, NE 68105

Catherine Lelli
Tucson, AZ 85741

Cecilia Boldt
Belmont Hills, PA 19004

Cheri Newman
Decatur, IL 62526

Clarence Munson
Oneonta, NY 13820

Cheri Carlson
Arlington, WA 98223

Cheri Langlois
Mendocino, CA 95460

Cherie Harrich
Carrollton, TX 75007

Cheryl Fala
Lansdale, PA 19446

Cheryl Zarn
Manistee, MI 49660

Dale Hockensmith
Fort Wayne, IN 46845

Dale LaCognata
Fishers, IN 46038

Dale Riehart
San Francisco, CA 94107

Dan Rice
Decatur, IL 62521

Charles Wieland
San Ramon, CA 94583

Charles Davis
Hoopeston, IL 60942

Chip Phillips
Sunnyside, NY 11104

Cody Dolnick
San Diego, CA 92107

Chip Waldron
Austin, TX 78745

Chris Casper
Oconomowoc, WI 53066

Chris Rehl
Saranac, MI 48881

D. Rex Miller
Boone, NC 28607

Chuck Rohrer
Seattle, WA 98102

Daniel Tiarks
Los Angeles, CA 90046

Daniel Vice
Washington, DC 20037

Daniel Weiss
Burlington, VT 05401

Danielle Cantin
Ann Arbor, MI 48104

Danielle Kalb
South Bend, IN 46619

Danny DeTora
Citrus Heights, CA 95610

Danny King
West Palm Beach, FL

Daphne Boldt
Kalona, IA 52247

Darlene Raunio
Tomahawk, WI 54487

Darlene Wolf
Naples, FL 34102

Darrell House
Wilkinson, IN 46186

Darrell Neft
Costa Mesa, CA 92626

Dave Fenimore
Newark, DE 19711

Cheri Dzubak
Yardville, NJ 08620

Christine Orlando
Mt. Pleasant, MI 48858

Cye Strowman
Mesa, AZ 85213

Christopher DeLisle
Hollis Center, ME 04042

Christy Donner
San Pedro, CA 90732

Chuck Countryman
Rock Creek, OH 44084

Cindy Krimmelbein
Biltmore Lake, NC 28715

Cliff Ward
Cordova, AK 99574

Dave Gliva
Plainfield, IL 60586

Dave Searles
Brodhead, WI 53545

Dave Spieler
Pennsauken, NJ 08109

Dave White
Santa Fe, NM 87507

David Cayford
Santa Rosa, CA 95401

David Chastain
Toccoa, GA 30577

David Gerke
Chatsworth, CA 91311

David Gustafson
Moline, IL 61265

David H Jones
Seattle, WA 98103

David Hayes
Dorchester, MA 2125

David Hoxworth
Houston, TX 77072

David L. Smith
Stevens Point, WI 54481

David Mull
Maryville, TN 37801

Don Bay
Pacific Palisades, CA

Cynthia Eggert
North Adams, MA 01247

Cynthia Ignatovich
Portland, OR 97220

Cynthia Stewart
Holbrook, MA 02343

Dana Bleckinger
Portland, OR 97219

Daniel McKinley
Albany, NY 12203

D. White
Bulls Gap, TN 37711

Dacia Soulliere
Dekalb, IL 60115

David Neral
St. Augustine, FL 32095

David Roth
Arlington, VA 22204

David Paul Xavier Burch
South Bend, IN 46614

David Saperia
Santa Monica, CA 90403

David Strong
Gardner, MA 01440

David Tyler
Lafayette, LA 70507

David Way
Parlin, NJ 08859

David Williams
Coos Bay, OR 97420

David Wilson
Myrtle Point, OR 97458

David Yao
Seattle, WA 98133

Dean Foss
Mount Pleasant, IA 52641

Deb Hamilton
Mesquite, NV 89024

Debbie Egan
Oakley, CA 94561

Donald Wilson
Philadelphia, PA 19111

Donlon McGovern
Portland, OR 97211

Claire Chang
Gill, MA 01354

Clarann Weinert
Bozeman, MT 59718

Dane Horn
Loretto, TN 38469

Daniel Bachmann II
Cambridge, OH 43725

Daniel Bartkewicz
Port Monmouth, NJ

Daniel Hawley
Ketchum, ID 83340

Daniel Kozminski
Solon, OH 44139

Daniel Puetz
Palatine, IL 60067

Daniel Robbins
Mackinaw City, MI 49701

Debbie Elholm
Madison, WI 53711

David Thibodeaux
Boulder, CO 80305

Debbie Woods
Potomac Falls, VA 20165

Deborah Cohen
Saint Louis, MO 63116

Deborah Hooper
Fostoria, OH 44830

Deborah Maufer
Menlo Park, CA 94025

Deborah West
Chapel Hill, NC 27517

Dee Randolph
Yankee Hill, CA 95965

Delores S Lawson
Hamersville, OH 45130

Delton Johnson
Santa Paula, CA 93060

Denie English
Uvalde, TX 78801

Dennis Dent
Shamokin, PA 17872

Dennis Johnston
Barcelona, Spain

Denise & Travis Hood
Bellingham, WA 98229

Dennis Jones
Cottage Grove, MN 55016

Dennis R. Patrick, Jr.
Damascus, MD 20872

Derrick White
Columbus, OH 43202

Diana Curington
Portsmouth, NH 03801

Diana Rush
Saint Cloud, MN 56304

Diane Darby Hall
Lavonia, GA 30520

Diane Taylor
Tucson, AZ 85745

Diane Abel
Bloomfield, NJ 07003

Diane Crummett
Soap Lake, WA 98851

Diane Fascione
Oak Park, IL 60302

Diane Pulsifer
Novato, CA 94949

Dianne Gaschler
Salt Lake City, UT 84109

Edh Stanley
Sacramento, CA 95823

Edmund Good
Harrisburg, PA 17109

Edric Guise
Long Beach, CA 90803

Edward Thornton
Swarthmore, PA 19081

Elaine Booth
Irvine, CA 92604

Elaine Fischer
Houston, TX 77054

Elaine Howes
Land O' Lakes, FL 34638

Elaine Nicholson, RN
Dallas, TX 75214

Elena Lemmo
Massillon, OH 44646

Dinda Evans
San Diego, CA 92117

Dini Schut
Toledo, OH 43606

D.J. Gardner
Glendale, CA 91201

Dolores Adams
Aurora, CO 80011

Don McKelvey
Euclid, OH 44123

Don Grierson
Los Angeles, CA 90046

Donald Burdett
New Castle, PA 16101

Donald Grbac
Valencia, PA 16059

Donald Judd
Pittsburg, KS 66762

Donald Mackay
South Pasadena, CA

Donna Nina
Teaneck, NJ 07666

Elizabeth Patsis
Mt Airy, GA 305663

Elizabeth Walters
Libertyville, IL 60048

Elke Hoppenbrouwers
East Haven, CT 06512

Ellen Bryant
Eureka, CA 95503

Ellen Smith
Havertown, PA 19083

Ellen Underwood
Asheville, NC 28803

Elyse Friedman
Fox River Grove, IL

Emily Lewis
Afton, VA 22920

Emma Ayers
St. Louis, MO 63124

Eric Bottomly
Socorro, NM 87801

Eric Chipman
Newton, MA 02458

Donna Bonetti
Boulder, CO 80303

Donna Clark
St Joseph, MI 49085

Donna Knipp
New York, NY 10034

Donna Laubhan
Booker, TX 79005

Donna Mummery
Honeoye Falls, NY 14472

Dona van Bloemen
Santa Monica, CA 90403

Dorene Schutz
Wilkes-Barre, PA 18702

Dori Grasso
Cockeysville, MD 21030

Dorothy Gillberg
Cleveland, OH 44116

Doris Murphy
Myrtle Beach, SC 29577

Dorothy Melancon
Luling, LA 70070

Erin O'Neal
Crest Hill, IL 60403

Erin Yarrobino
Ozone Park, NY 11416

Ernest Davis
Baltimore, MD 21234

Ernesto Pascual
Miami Beach, FL 33139

Estelle Voeller
Ashland, OR 97520

Evan Eisentrager
Boulder, CO 80301

Evangeline Chinn
Paradise, CA 95969

Evelyn J. Dymkowski
Clinton, IA 52732

Felicity Hohenshelt
Jacksonville, FL 32246

Fitz Fleenor
Antioch, TN 37013

Frances Patch
Takoma Park, MD 20912

Dorothy Weber
Murfreesboro, TN 37129

Dorri & Florence Raskin
Northridge, CA 91326

Doug Casner
Mi Wuk Village, CA

Doug Myler
Blue Springs, MO 64014

Douglas Meyer
Las Vegas, NV 89129

Drena LaPointe-Meyer
Gilbert, AZ 85234

Drew Keller
Knoxville, TN 37919

Duncan Macomber
Doswell, VA 23047

Dwaine Martin
Stockton, CA 95207

E. Hegeman
New York, NY 10024

Earl Rosenwinkel
Duluth, MN 55805

Elizabeth Guthrie
Rochester, NY 14618

Ed Bender
Rochester, NY 14620

Frank Armato
Franklin, NC 28734

Frank Mccormick
Memphis, TN 38117

Frank X. Kleshinski
Jeannette, PA 15644

Franklin Ellis
Scottsville, NY 14546

Fred Kay
Tucson, AZ 85716

Fred Koster
New York, NY 10028

Fred Lifton
Highland Park, IL 60035

Erin Marshall
Chicago, IL 60613

G. Hande
West Haven, CT 06516

Elgin Lee Baker
Philadelphia, PA 19143

Elizabeth Ungar
New York, NY 10023

Elizabeth Bryant
Meridian, ID 83642

Elizabeth Dodd
Boca Raton, FL 33498

G.T. Gerrard
Black River, NY 13612

Gaey Austin
Lilburn, GA 30047

Gail Caiola
Frankfort, NY 13340

Gail Lack
Salinas, CA 93906

Gail Payne
Huntington, NY 11743

Gary Best
Sharon, MA 02067

Gary Reese
San Clemente, CA 92673

Gary Vedvik
Pittsford, NY 14534

Gayle Sellers
Collegeville, PA 19426

Gemma Geluz
Fairfield, CA 94534

Gene Chorostecki
Georgetown, TX 78628

Genevieve Maiberger
Teaneck, NJ 07666

Georgai Pawlowski
Akron, OH 44306

J. Avilla
Portola Valley, CA 94028

J. Capozzelli
New York, NY 10024

J. T. Parker
Hamilton, MT 59840

J. W. and Mary Lee Milton
Urbana, IL 61801

Jack Bradin
Jensen Beach, FL 34957

Erin Edwards
Ancram, NY 12502

Erin Foley
Hazlet, NJ 07730

George B. Hutchinson
Newport, OR 97365

George Robinson
New York, NY 10033

George Shrewsbury
Prescott, AZ 86303

GeorgiaAnn Muenzler
Tulsa, OK 74129

Gerald Houlihan
Iselin, NJ 08830

Gerald Meike
Riverside, OH 45424

Gerard Weber
Fresno, CA 93726

Gerhard Bedding
Keene, NH 03431

Ginger Cook
Goliad, TX 77963

Ginny Schneider
Osprey, FL 34229

Glen Anderson
Lacey, WA 98503

Gloria Diggle
Fort White, FL 32038

Gloria L. Klimczak
Akron, OH 44310

James Gaboury
Waukesha, WI 53186

James H Jorgensen
Ames, IA 50014

James Harris
Stanford, CA 94305

James Hoyt
Ann Arbor, MI 48103

James Jacobs
Cincinnati, OH 45230

James Mays
Churchville, PA 18966

James Mulder
Wappingers Falls, NY

Frances Perlman
West Paris, ME 04289

Frances Simpson
Tacoma, WA 98404

Gloria Morrison
Pecos, TX 79772

Greg Rupert
Duluth, MN 55803

Greg Yeargain
Ironton, MO 63650

Gregory Pickett
Villa Park, IL 60181

Gustavo Sandoval
San Mateo, CA 94403

Gwyn Williams-Stanton
Sonoma, CA 95476

H. Ball
Heber, UT 84032

H. James Rhodes
Sequim, WA 98382

H. Schaktman
Shelburne Falls, MA

Harold T. Hodes
Ithaca, NY 14850

Harriet McCleary
Minneapolis, MN 55404

Harrison Heitman
Conyers, GA 30012

Harry Hazelton
Alton, IL 62002

Jan Michaels
Hazelwood, MO 63042

Jane Stowe
Richmond, IN 47374

Jane Fee
Woodbury, MN 55125

Janet Erion
Commerce, TX 75428

Janet Rock
Rochester, NY 14616

Janet Schmauss
Waggaman, LA 70094

Janet Williams
Santa Fe, NM 87505

G. Stephen Christopher
Troy, NY 12180

G. Konecky
Fair Lawn, NJ 07410

G. M. Malcomson
Naples, FL 34109

Heidi Hartman
Ione, OR 97843

Heather Orn
Rantoul, IL 61866

Helen Arnold
Colonial Heights, VA

Helene Stone
Saint George, UT 84770

Henry Bosch
Baltimore, MD 21228

Herbert Wrabel
Suffern, NY 10901

Howard Cohen
Palo Alto, CA 94306

I. Gac
Rochester, NY 14617

Ian Cree
San Francisco, CA 94110

Ingrid Emming
Rio Nido, CA 95471

Irene Froyd
Elgin, OR 97827

Irene Pearce
Orange, CA 9286

Irene Walworth
Pepperell, MA 01463

Jean Salmon
Santa Clara, CA 96055

Jeanie Williams-West
Mer Rouge, LA 71261

Jeanne Lamar
Sunnyvale, CA 94087

Jeannine Coleman
Easley, SC 29642

Jeff Brown
Felton, CA 95018

Jeff Horne
Los Angeles, CA 90036

Jack Runnels
Cheyenne, WY 82001

Jacob Litoff
Millis, MA 02054

Jacqueline A. Jones-Ford
Knoxville, TN 37919

Jacqueline Carter
Carrollton, TX 75007

Jacqueline Friederichsen
Knoxville, TN 37917

James & Cynthia Enlow
Albany, OR 97321

James and Sarah Flick
Cupertino, CA 95014

James Button
Boulder, CO 80305

Jennifer Quigley
Toms River, NJ 08755

Jennifer Cody
Brooklyn, NY 11238

Jennifer Hill-Hart
Helena, MT 59601

Jennifer M. Weishaar
Lawrence, KS 66044

Jenny Gundy
Williston, VT 05495

Jeremy Miller
St. Charles, MO 63304

Jeremy Start
Kalamazoo, MI 49006

Jerry Bloomer
Hot Springs, SD 57747

Jesse Williams
Denver, CO 80211

Jessica Cresseveur
New Albany, IN 47150

Jessica DiCamillo
San Francisco, CA 94131

John Walker
San Diego, CA 92104

John Mead
Santa Cruz, CA 95060

John Patsis
Mt Airy, GA 305663

James Roberts
Palouse, WA 99161

James Shawvan
San Diego, CA 92104

James Zitis
Orlando, FL 32869

Jamie Morris
Sandusky, OH 44870

Jan Kochmeister
Lakewood, CO 80228

Jerry Myers
Port Charlotte, FL 33952

Jessica Manganello
Arlington, MA 02474

Jessica Marcy
Spokane, WA 99204

Jessica Rocheleau
Maple Grove, MN 55369

Jessie Casteel
Houston, TX 77035

Jill Gleeson
Philipsburg, PA 16866

Jim Fee
Chesapeake, VA 23320

Jim Stewart
Cedar Falls, IA 50613

Jim Thompson
Knox, PA 16232

Jitka Mencik
Springerville, AZ 85938

Jitka Parmet
Camarillo, CA 93012

Jo Ann Bazata
Cassopolis, MI 49031

Jo Ford
Oakland, CA 94618

Jordan Pakaki
El Paso, TX 79924

Joseph Bayley
Port Townsend, WA

Joseph Dangelo
East Northport, NY 11731

Joseph Grinnell
Richardson, TX 75080

Jared Cornelia
Wilmington, DE 19804

Jason Chinn
Cloverdale, CA 95425

Jason O'Neill
Portland, OR 97230

Jean Pauline
Oakland, CA 94602

Jean Craig
Fort Worth, TX 76115

Jean Hodgins
Ballston Spa, NY 12020

Joan A. Hutchinson
Kapaau, HI 96755

Joan Bauereiss
Hamptom, NJ 08827

Joan Hackel
Wetumpka, AL 36093

Joan Mitchell
Hermitage, TN 37076

Joanie Grace
Austin, TX 78745

JoAnn Witt
Kansas City, MO 64114

Joanna Kelly
West Hollywood, CA

Jody Fritzke
Isanti, MN 55040

Joe Salazar
Santa Ros, CA 95407

Joe Swierkosz
Palatine, IL 60067

John Harper
South Daytona, FL 32119

John A Beavers
Chicago, IL 60647

John Anderson
Long Beach, CA 90805

Judith L'Heureux
New Rochelle, NY 10805

Judith Misale
Kirksville, MO 63501

Judy Dolan
Indianapolis, IN 46236

Jeff Toste
Providence, RI 02909

Jeffrey Bedrick
Bryn Mawr, PA 19010

Jeffrey Knopf
Amherst, MA 01002

Jeffrey Schultz M.T.S.
Gualala, CA 95445

Jeffrey Surovell
New York, NY 10029

Jen Salome
Phoenix, AZ 85044

Jenae Neiderhiser
Middleburg, VA 20118

John Barfield
Atlanta, GA 30329

John Barnes
Fort Worth, TX 76102

John Butler
Elgin, IL 60123

John Carter
Antioch, IL 60002

John Consentino
Irvine, CA 92612

John Curotto
Quinebaug, CT 06262

John Gasperoni, Ph.D.
Berkeley, CA 94703

John H. Anderson
San Diego, CA 92103

John Hakos
Cape Coral, FL 33914

John Hartman
Tulsa, OK 74114

John Lynn
East Hampton, NY 11937

John Mcintosh
Portland, OR 97221

June Swan
Corte Madera, CA 94976

K. Durkin
Waterford, MI 48328

K. Searle
Berkeley Heights, NJ

John Paul Coakley
Valley Village, CA 91602

John Ray
Fayetteville, AR 72701

John Shumaker
Cedar Rapids, IA 52404

John Soucek
Edelstein, IL 61526

John White
Mosca, CO 81146

John & Patricia Savage
Northwood, NH 03261

Johnny Everett
Washington, NC 27889

Joleen Daehlin
Loon Lake, WA 99148

Jon Current
Hillsboro, OR 97124

Jon Ryk
Ely, IA 52227

Jonathan Nash
New York, NY 10028

Karl Knutsen
Minneapolis, MN 55406

Kate Ryan
Delhi, NY 13753

Katherine Farago
Mesa, AZ 85210

Katherine Schwirzinski
Toledo, OH 43615

Katherine Sturtz
Garden City, TX 79739

Kathleen Adair
Kawkawlin, MI 48631

Kathleen Buffalo
Aberdeen, SD 57401

Kathleen Dickerson
Johnson City, NY 13790

Kathleen Mello-Nelson
Aurora, CO 80013

Kathleen Morris
Columbus, OH 43214

Kathryn Melton
Deer Park, TX 77536

Joseph Lite
Yellow Springs, OH

Joseph Theriault
San Francisco, CA 94122

Joshua Angelus
Waterbury, CT 06710

Joshua Stein
San Francisco, CA 94117

Joyce Bass
Arlington, TX 76006

Joyce Crowley
Morton, PA 19070

Joyce McGilvery
Greensboro, NC 27407

Judi Trecartin
Holiday, FL 34691

Judith Hazelton
Bennington, VT 05201

Kathy Chadwell
Lafayette, IN 47909

Kathy Owen
Carthage, NC 28327

Kathy Riggle
Seabrook, TX 775586

Kathy Vinson
Madison, GA 30650

Kay Popelka
Ames, IA 50010

Keith A. Scarmato
Seattle, WA 98111

Keith Turner
Keller, TX 76248

Kelley Scanlon
Syracuse, NY 13206

Kelly Reilly
Philadelphia, PA 19106

Kelly Riley
Hummelstown, PA 17036

Ken Fogel
Stone Mountain, GA

Karen Orchard
Silver Springs, NV 89429

Ken Maloney
Huntington Beach, CA

Judy Hardegree
Quitman, TX 75783

Judy Moen
Crookston, MN 56716

Juliana Boner
Elk River, MN 55330

Julie Du Bois
West Hill, CA 91304

Julie Boswell
Cleveland, OH 44102

Julie Ford
Huntington Beach, CA

Julie Owen
Berkeley, CA 94707

Juliet Farrell
Marstons Mills, MA 02648

Jordan Heiman
Saint Louis, MO 63132

Judith Stevens
Lake Zurich, IL 60047

Ken and Donna Bubb
Las Vegas, NV 89123

Kent Ferguson
Wayne, IL 60184

Kent Johnson
Ballwin, MO 63011

Kerby Miller
Columbia, MO 65203

Kerri Saxer
Cheektowaga, NY 14225

Kerry & Beth Ramsey
Strongsville, OH 44149

Kevin Crisler
Kettering, OH 45420

Kim English
Logansport, IN 46947

Kim Fortin
Minneapolis, MN 55418

Kim Tostenson
Evansville, MN 56326

Kathryn Plitt
Gig Harbor, WA 98332

Kimberly Clemens
Shillington, PA 19607

Karen Bernhardt
Albuquerque, NM 87111

Karen Clark
Walnut Creek, CA 94596

Karen Glauber
Vestal, NY 13850

Karen Gonzales
Fallon, NV 89406

Karen Gray
Greenwood, IN 46143

Karen Haralson
Felton, CA 95018

Karen Helsing
Brookfield, IL 60513

Karen Jenne
South Pasadena, CA

Karen Jones
Venice, CA 90291

Karen Keating-Secular
Rego Park, NY 11374

Kimberly Peterson
Cloverdale, CA 95425

Kimberly Wysong
Huntington, WV 25701

Kirby G Miller
Farmington, MI 48836

Klaus Steinbrecher
Angel Fire, NM 87710

Kripa Sundar
Southboro, MA 01772

Kris Leesekamp
Cedar Rapids, IA 52401

Kris Muto
Wilmington, DE 19808

Kris Pagenkopf
Gainesville, FL 32607

Kristen Gottuso
Jacksonville, FL 32223

Kristen Osman
Upland, CA 91784

Kristian Kelly
Redding, CA 96002

Kylie Cobb
New York, NY 10025

Kathryn Pennell
Phoenix, AZ 85032

Kathryn Wells
Springfield, MO 65807

K.S. Cromer
Princeton, NJ 08540

L. Friedman
Longmeadow, MA 01106

Lacey S. Cannon
Shelley, ID 83274

Laila Aussie
Tempe, AZ 85282

Larry Phipps
Chico, CA 95926

Larry Bulling
Corvallis, OR 97330

Larry Etscovitz
Kittery, ME 03904

Larry Herman
Sun Valley, NV 89433

Larry Madsen
Seattle, WA 98133

Larry Siegel
Plainsboro, NJ 08536

Laura Baldwin
Toms River, NJ 08753

Laura McKee
Micco, FL 32976

Lizeth Swartz
El Paso, TX 79912

Liz Wally
Dallas, TX 75241

Lois Gregory
Dana Point, CA 92629

Lois Stenzel
Whitestone, NY 11357

Loretta Anshutz
Tampa, FL 33617

Lori Albee
Salinas, CA 93907

Lori Lorant
Bothell, WA 98012

Lori Mulvey
Comstock Park, MI 49321

Laura Rice
Farmington Hills, MI

Laura Rovinsky
Forest Hills, NY 11375

Lauren Pacheco-Theard
Coeur d' Alene, ID 83814

Lauri Peacock
Hobbs, NM 88240

LaVonne Otwell
Marietta, GA 30064

Lawrence Althouse
Dallas, TX 75205

Lawrence Camp
Morganton, NC 28655

Lawrence Rozenfeld
Wappingers Falls, NY

Lawrence Ynesta
Miami, FL 33055

Leda Slattery
Modesto, CA 95350

Lee Eisenberg
Portland, OR 97239

Lee Frank
Sherman Oaks, CA

Lee Hutchings
Palacios, TX 77465

Louis Breitbach
Massapequa, NY 11758

Louis Rendon
Pasadena, CA 91106

Louis Zeller
Glendale Springs, NC

Louise Calabro
Bayside, NY 11360

Louise Clark
Lafayette, CA 94549

Louise Merlyn
Marietta, GA 30067

Lucy McCrone
Chicago, IL 60616

Kim Fuqua
Denver, CO 80211

Lynda Leibowitz
Tuxedo Park , NY 10987

Lee Gardner
Venice, CA 90291

Lee Lorentzen
Des Plaines, IL 60016

Leisl Schrader
Fairfield, NJ 07004

Lenny Chrostowski
Macomb, MI 48042

Leon Weiner
Portland, OR 972024

Lesa Sowell
Boerne, TX 78006

Leslie Glendye
Somerset, MA 02725

Leslie Harris
Mount Marion, NY 12456

Leslie Tawnamaia
Cabot, VT 05647

Lih Young
Rockville, MD 20854

Lily Leung
Alameda, CA 94502

Linda Bescript
Tucson, AZ 85747

Linda Gusch
Spokane, WA 99223

Mana Hideki
New York, NY 11485

Marc Dudney
Lutz, FL 33548

Marc Rubin
Hamilton Square, NJ

Marcella Hammond
San Diego, CA 92104

Marcus Sabom
Sugar Land, TX 77479

Margaret Cooney
Plymouth, MA 02360

Margaret Brown
Shelton, WA 98584

Margaret Muniz
Cranston, RI 02910

Margarit Dusek
Cudahy, WI 53110

Kim Wyatt
South Lake Tahoe, CA

Linda Helm Krapf
Stockton, NJ 08559

Linda Howe
Belmont, MA 02478

Linda Ng
Jackson Heights, NY

Linda Rock
Fall River, MA 02723

Linda Tesser
Norwalk, CT 06880

Linda Gazzola
Tarrytown, NY 10591

Linnis Cook
Bridgton, ME 04009

Lisa D'Antonio
Fort Lauderdale, FL

Lisa Hulett
Arnold, MO 63010

Lisa J. Gosnell
Georgetown, DE 19947

Lisa Langcake
Fort Mill, SC 29715

Lisa Morrison
Oakland, CA 94618

Lisa Piner
Costa Mesa, CA 92626

Maria Stahl
Montpelier, OH 43543

Marianne Freidberg
New Fairfield, CT 06812

Marie Wolfe
Annville, PA 17003

Marilyn J. Snider
Lakewood, WA 98439

Marilyn Booton
Saint Paul, MN 55107

Marilyn Smith
Lawrence, KS 66047

Mark Cosgriff
Lakewood, OH 44107

Mark Fleming
Seattle, WA 98108

Lori Peniche
Dallas, TX 75230

Lori Sherry
San Antonio, TX 78247

Lorne Beatty
Brighton, MI 48114

Lorraine D. Johnson
Seattle, WA 98118

Lou Anna Denison
Long Beach, CA 90815

Mark Salamon
Harwich, MA 02645

Marcia Bailey
Blacksburg, VA 24060

Marla Butterworth
Bellingham, WA 98225

Marleen Dutra
Storrs, CT 06268

Marlowe Mogul
Woodland Hills, CA 91367

Martha & Irwin Spiegelman
Amherst, MA 01002

Mary Ann Smale
Steuben, ME 04680

Mary Ann Kahl
Uniontown, PA 15401

Mary Ann Wilson
Los Angeles, CA 90024

Mary Burnley
Eugene, OR 97402

Mary Detrick
St. Petersburg, FL 33710

Mary E. Ford
Ocean Pines, MD 21811

Mary Frances Gebhard
Eau Claire, WI 54701

Michael Rall
Carey, OH 43316

Michael L. Spina
Holbrook, NY 11741

Michael Toto
Redding, CT 06896

Michael W Evans
Los Angeles, CA 90066

Lynn Coffey-Edelman
Huntington Station, NY

Lynn Wolf
Saugus, CA 91350

M. Erickson
Monterey, CA 93942

M Stocker
New York, NY 10024

Maja Silberberg
Valley Village, CA 91607

Mary Gutzwiller
Cincinnati, OH 45233

Mary Hagiwara
Randolph, NJ 07869

Mary Hamilton
Hammond, NY 13646

Mary Gaasch
Lauderdale, MN 55113

Mary Jean Waller
Sherman Oaks, CA

Mary Lou Finley
San Diego, CO 92154

Mary Meckley
Chicago, IL 60607

Mary Riley
Hoquiam, WA 98550

Mary Steckbeck
Lebanon, KY 40503

Mary Xakellis Chapman
Greenbelt, MD 20770

Maryann G. Strain
Evanston, IL 60201

MaryAnna Foskett
Arlington, MA 02476

MaryElla Adams
Munising, MI 49862

Mike Bonar
San Mateo, CA 94402

Mike Mullarkey
Tucson, AZ 85701

Mike Scott
Walnut Creek, CA 94596

Melissa Lemke
Glens Falls, NY 12801

Marguerite Winkel
Spokane, WA 99201

Maria DiFiore
Chicago, IL 60625

Maria Hance
Pevely, MO 63070

Maria Rosen
Ambler, PA 19002

Mary Fussner
Denver, CO 80205

Maryellen Redish
Palm Springs, CA 92264

Matthew Abuelo
New York, NY 10024

Matthew Cleveland
Elizabethtown, PA 17022

Matthew Perlegis
New Port Richey, FL

Maura O'Connor
Newark, DE 19713

Maureen Michael
University Place, WA

Maurice Rice
Cuyahoga Falls, OH

Max Kaehn
Sunnyvale, CA 94086

Megan Garrett
Sacramento, CA 95835

Melian Boyle
Escondido, CA 92029

Melinda Broadwater
Portland, OR 97202

Melissa Herring
Portland, OR 97206

Morgan Lindsay
Millbrook, NY 12545

Morley Schloss
Loxahatchee, FL 33470

Mr.& Mrs. Brue Revesz
Cedar Grove, NJ 07009

Mrs. Jack McMullen
Montgomery, AL 36109

Nadia Hyppolite
Brooklyn, NY 11210

Mark Hayduke Grenard
Phoenix, AZ 85007

Mark Heald
Pleasant Hill, TN 38578

Mark Johnson
Traverse City, MI 49696

Mark Lusch
Torrey, UT 84775

Mark Reback
Los Angeles, CA 90064

Melissa Judge
Tampa, FL 33607

Melissa McCool
Selah, WA 98942

Melody Heart
Sedona, AZ 86340

Metric Clay
Starkville, MS 39759

Michael Bayouth
Wichita, KS 67207

Michael Balsai
Philadelphia, PA 19102

Michael Bologna
Monte Rio, CA 95462

Michael Bordenave
Fresno, CA 93728

Michael Cozad
Eugene, OR 97405

Michael Crane
Sierra Vista, AZ 85650

Michael Lewis
Coventry, RI 02816

Michael Mertes
Iola, WI 54945

Michael Merz
San Rafael, CA 94903

Nancy S. Lovejoy
Wilbraham, MA 01095

Nancy Skeen
Fresno, CA 93726

Nancy Sossner
Lombard, IL 60148

Nancy Stanley
Raleigh, NC 27606

Michael Wichman
Naples, FL 34110

Michele Horton
Cave Junction, OR 97523

Michele Smith
Brooklyn, NY 11217

Michelle Jordan
Castro Valley, CA 94546

Michelle Lerner
Flanders, NJ 07836

Michelle Madigan
Bristol, PA 19007

Michelle Salvail
Rohnert Park, CA 94928

Nancy Hatfield
North Chelmsford, MA

Nancy Ranieri
Dresher, PA 19025

Navin Shankar
Hoffman Estates, IL 60169

Neal Crandall
Springfield, OH 45502

Nicholas Hartman
Tulsa, OK 74114

Nicholas Lawrus
Pleasant Hill, CA 94523

Nick Berezansky
Ridgewood, NJ 07450

Nicole Mussen
Walled Lake, MI 48390

Nicole Smith
Cleveland Heights, OH

Nina Keefer
Longmont, CO 80501

Olga Sekulich
New York, NY 11355

Olga Zharkova
Edmonds, WA 99026

Olive Jordan
Port Washington, NY 11050

Olivia Alfano
Brinnon, WA 98321

P.A. Giuffrida
Arcadia, CA 91007

Mikki Chalker
Binghamton, NY 13905

Mildred Martin
Hiawassee, GA 30546

Miriam Stahl
Exeter, NH 03833

Mitzi Coons
Los Angeles, CA 90028

Molly Hauck
Kensington, MD 20895

Monika Romero
San Francisco, CA 94121

Monte Needham
San Jose, CA 95112

Natalie Mannering
Gainesville, MO 65655

Natasha Shpiller
Chicago, IL 60660

Pamela Chipman
Mancos, CO 81328

Pamela Cox
Ogden, UT 84404

Pamela Dehmer
Bel Air, MD 21014

Pamela Hosler
St. Louis, MO 63139

Pamela Oberg
Somersworth, NH 03878

Pat and Tom Willis
Rainbow Lake, NY 12976

Pat Hespell
Shrewsbury, MA 01545

Pat Johnson
Galloway, OH 43119

Patricia Archuleta
Reno, NV 89509

Patricia Chang
Indianapolis, IN 46260

Patricia Dishman
Nashville, TN 37221

Patricia English
Hamptonville, NC 27020

Patricia Leavitt-Pagaling
Ojai, CA 93023

Nancy Paquette
Fort Bragg, CA 95437

Nancy Ashley
New York, NY 10024

Nancy Danielsen
Springfield, MO 65807

Nancy Drew
Clifford, ND 58016

Nancy Ellingham
Bellevue, WA 98006

Nancy Longo
Dayton, OH 45419

N.K. Acevedo
Revere, MA 02151

Noreen Wheller
Smithtown, NY 11787

Patricia McHugh, MA
St. Louis, MO 63130

Patricia Murillo
Denver, CO 80212

Patricia Phillips
Kent, OH 44240

Patrick Bosold
Fairfield, IA 52556

Patrick Cameron
El Cajon, CA 92021

Patrick Dolan
Mount Prospect, IL 60056

Patti Constantino
Spring Hill, FL 34610

Patty Diana
Glendale, AZ 85301

Patty Hopkinson
Barrington, RI 02806

Paul Aldrich
The Woodlands, TX

Paul Drowns
Portland, ME 04101

Paul Impola
Albany, NY 12207

Paul Kinsman
Gillett, PA 16925

Regina Cappelletti
Canton, MI 48188

Nancy Walker
Los Angeles, CA 90048

Nancy Young
Erie, PA 16501

Nandi Devam
Berkeley, CA 94710

Nat Childs
Miranda, CA 95553

Natalie Hanson
Lansing, MI 48917

Natalie Houghton
Prescott, AZ 86303

Nathan Blyveis
Cape Coral, FL 33991

Nathan Hecht
Bozeman, MT 59718

Nathan Kendall
New York, NY 10025

Paul Moss
White Bear Lake, MN

Paul Netusil
Old Tappan, NJ 07675

Paul Schneller
Bloomington, IN 47408

Paul Szymanowski
Curtice, OH 43412

Paula Zerzan
Glen Ellen, CA 95442

Pauline D. Robertson
Amarillo, TX 79206

Pauline Dujardin
Brussels, OT 1140

Peggy Detmers
Rapid City, SD 57702

Penelope Norton
Cambria, CA 93428

Penny LaDeur
Floyd, VA 24091

Peter Crane
Sausalito, CA 94965

Peter Gunther
Chicago, IL 60625

Peter Seidman
Berkeley, CA 94703

Peter Stone
Bethlehem, PA 18017

Philip Simon
San Rafael, CA 94912

Philip Walker
Franklin, NC 28734

Phillip Barr
Hobbs, NM 88240

Phillip Sauve
Kalamazoo, MI 49006

Phoebe Blanchford
Decatur, GA 30030

Phyllis Swank
Chapel Hill, NC 27516

Polly Werner
Gainesville, FL 32601

Presly Deen Hollingsworth
Starks, LA 70661

R. Heringslake
Milford, DE 19963

Rachel Beitz
Crookston, MN 56716

Rachael Denny
Bradley, CA 93426

Rachael Harrison
Gainesville, FL 32607

Rob Temple
Atlanta, GA 30308

Robert & Amy Anderson
Kalamazoo, MI 49006

Robert Cote
Kankakee, IL 60901

Robert DeJonckheere
San Diego, CA 92169

Robert Hawkins
Tujunga, CA 91042

Robert Hicks
Long Beach, CA 90803

Robert Keller
San Diego, CA 92119

Robert L Foley Jr.
South Attleboro, MA 02703

Robert Lesko
New York, NY 10009

Rachelle Ward
Vail, AZ 85641

Ralph Underwood
Austin, TX 78757

Ralph Werner
Escondido, CA 92025

Ramon Ocasio
Chicago, IL 60618

Randy McMillan
Lexington, KY 40511

Ravi Grover
Chicago, IL 60680

Ray Cellura
Abbeville, SC 29620

Ray Morris
Bakersfield, CA 93308

Raymie Connolly
Sacramento, CA 95815

Raymond Keeling
Milford, MI 48381

Rebecca Malchek
Beaver Dam, WI 53916

Rebecca Reid
Cobleskill, NY 12043

Rebecca Thomas
Des Plaines, IL 60016

Robert Strebeck
Euless, TX 76039

Robert Wolf
Naples, FL 34102

Roberta Paro
Norwich, CT 06360

Roberta Richardson
Melbourne, FL 32902

Roberta Thurmond
Hixson, TN 37343

Robin Gorges
Montpelier, VT 05602

Robin Kory
Bexley, OH 43209

Robin Mayerat
Hamburg, NY 14075

Roger Gillberg
Tucson, AZ 85713

Regina Walther
New Lebanon, NY 12125

Renee Krause
Greenville, TX 75401

Rev. Marlena Mallner
New York, NY 10025

Ricardo Sowell
Portage, MI 49024

Rich Trzcinski
Destin, FL 32541

Richard & Roberta Baldwin
RFD Jersey Shore, PA

Richard Clemans
St. James, MO 65559

Richard Gorringe, Ph. D.
Portland, OR 97211

Richard Kostynowicz
Chicago, IL 60638

Richard Ledger
Howard City, MI 49329

Richard Lombard
Groveland, MA 01834

Richard Medlock
Miami - Redlands, FL

Rose Peters
Albuquerque, NM 87108

Rose Florek
Portland, OR 97219

Roseanne Hartman
Tulsa, OK 74114

Rosel Pine
Orange Park, FL 32065

Roselina Guerra
Kissimmee, FL 34743

RoseMaria Root
Parkton, MD 21120

Rosemarie Sawdon
Blacksburg, VA 24060

Rosemary Graham-Gardner
Manhattan Beach, CA

Rosemary Ward
Greenville, MS 38701

Roslyn Broch
Amherst, MA 01002

Richard Miller
Lihue, HI 96766

Richard Sam Salmon
Green Bay, WI 54302

Richard Spotts
St. George, UT 84770

Richard Thayer
Panama City, FL 32406

Richard Ulrich
Hinckley, MN 55037

Rik Masterson
Portland, OR 97211

Rita Eccles
Phoenix, AZ 85014

Rita Gallin
East Lansing, MI 48823

Roaney Giles
Austin, TX 78746

Rob Caylor
Indianapolis, IN 46221

Rob Eckmann
Libertyville, IL 60048

Rob Hemmick
St. Petersburg, FL 33743

Roy Treadway
Normal, IL 61761

Roy Wilson
New York, NY 10014

Rozella Dudley
Oakhurst, CA 93644

Ruby Rahn
Kansas City, MO 64151

Russell Damewood
St. Petersburg, FL 33710

Ruth Duty-Diaz
Alexandria, VA 22311

Ruth O'Neal
Effingham, NH 03882

Ruth Remple
Longmont, CO 80503

Ruth Vitale
Los Angeles, CA 90046

Ryan Danzinger
Arlington Heights, IL

Robert Lincoln
Rutland, VT 05701

Robert Pancner
Darien, IL 60561

Robert Rutkowski
Topeka, KS 66605

Robert Silesky
Callaway, MD 20620

Samuel Inabinet
Virginia Beach, VA 23464

Sander Valyocsik
Hot Springs, CA 93207

Sandra Blackburn
La Puente, CA 91744

Sandra Brown
Rio Rancho, NM 87144

Sandra Cutter
Anacortes, WA 98221

Sandra Hermes
Cincinnati, OH 45224

Sandra Holt
Casselberry, FL 32707

Sandra Moskovitz
Princeton, NJ 08542

Sandra Siegner
Portland, OR 97219

Sandra Wagner
Bryan, OH 43506

Sandy J.
New York, NY 10019

Sara Schmidt
Arnold, MO 63010

Sarah Romano
Santa Cruz, CA 95060

SnowOwl Sor-Lokken
Salt Lake City, UT 84103

Sofia Plits
Newton, MA 02466

Sonja Malmuth
Santa Ynez, CA 93460

Sophia Vassilakidis
Houston, TX 77006

Spencer Selander
Castle Rock, WA 98611

Roland Press
Hermosa Beach, CA

Ron Rattner
San Francisco, CA 94109

Ronald Bilodeau
Rochester, NH 03868

Ronda Snider
Gig Harbor, WA 98329

Sarah Amberge
Newfield, NY 14867

Sarah Hafer
Albany, OR 97322

Sarah McCann
Fayetteville, NY 13066

Sarah White
Staten Island, NY 10314

Sayard Daniels
Blaine, WA 98230

Scott Jenkins
San Luis Obispo, CA

Scott Baker
Omaha, NE 68118

Scott Cady
Minneapolis, MN 55419

Scott Dulas
Duluth, MN 55806

Scottie Kenyon
Sparks, GA 31647

Seana Blake
Ellensburg, WA 98926

Seibert McCormick
Mountain Home, AR

September Jazzborne
Melbourne, FL 32902

Stephen Greenberg
Nevada City, CA 95959

Stephen Zerefos
Warren, OH 44483

Steve Berman
Glendale, CA 91201

Steve Branch
Providence, RI 02906

Steve Downing
Santa Barbara, CA 93109

Roy Barrows
Los Angeles, CA 90066

Roy Fuller
Caroga Lake, NY 12032

Roy Henock
Eureka, CA 95501

Seth Rutledge
Syracuse, NY 13210

Seth Shulman
Webster, NY 14560

Shari Au
Honolulu, HI 96822

Shari Katz
Westmont, IL 60559

Sharisa Kochmeister
Lakewood, CO 80228

Sharon Ewton
Vista, CA 92084

Sharon Haley
Lebanon, OR 97355

Sharon Johnson
Osceola, WI 54020

Sharon Keys
Alexandria, VA 22304

Shaun O'Connell
Staten Island, NY 10304

Shawn Young
Central, SC 29630

Shellee Davis
Cotati, CA 94931

Shelley Jesses
Union City, GA 30291

Steven Langer
Park Forest, IL 60466

Steven Sciame
Chicago, IL 60656

Steven Stiller
Norridgewock, ME 04957

Steven Wiener
Vista, CA 92084

Stonewall Bird
Mount Vernon, WA 98273

Stu Winnie
Tacoma, WA 98409

S. Lightner
Tucson, AZ 85705

S. Rothschild
McLean, VA 22101

Saerom Park
Washington, DC 20011

Shelley Lund
Gardnerville, NV 89410

Shelley Rothwell
Ypsilanti, MI 48197

Sheri Archey
Salem, OR 97301

Sherley Redding
Newport News, VA 23606

Sherrill Futrell
Davis, CA 95618

Sherry Cassidy
Paris, TX 75460

Sherry Marsh
Oceanside, CA 92056

Sherry Petersen
Santa Barbara, CA 93101

Sherry Schnebel
Piedmont, AL 36272

Shirley Coon
New York, NY 10022

Shirley Dix
Cincinnati, OH 45233

Siamak Vossoughi
San Francisco, CA 94118

Silvia Wend
Chestnut Ridge, NY

Sunny Tabino
Summerville, OR 97876

Susan Clemens
New Haven, CT 06515

Susan Evilsizer
Cleveland, OH 44130

Susan Maxwell
Broomfield, CO 80020

Susan Quickel
Pleasanton, CA 94566

Susan Selbin
Albuquerque, NM 87104

Srikanth Maddukuri
Little Ferry, NJ 07643

Stacy Billingsley
Desert Hot Springs, CA

Stan Martin
Tishomingo, OK 73460

Stefanie Gandolfi
Oakland, CA 94605

Stephanie Rosado
Union City, NJ 07087

Stephen Davis
San Antonio, TX 78213

Stephen Gliva
Chicago, IL 60640

Tamara Bannister
Fort Polk, LA 71459

Tamera Bryant
Columbus, OH 43205

Tammy Robinson
Asheboro, NC 27205

Teresa Jaeger
Oviedo, FL 32765

Teresa Parcell
Elkview, WI 25071

Terri Blakley
San Diego, CA 92104

Terri Gilreath
Hapeville, GA 30354

Terri Stalker
Atlanta, GA 30360

Terry Bobb
Bonney Lake, WA 98391

Theodore Lundgren
Cape Coral, FL 33909

Theodore Scribner
Cuyahoga Falls, OH 44223

Theodore Zegarski
Chicago, IL 60618

Theresa Wiegand
Savannah, GA 31419

Thomas & Mrs. Lorina Hall
Bellingham, WA 98229

Thomas Avery
Louisville, KY 40299

Steve Savitch
Tucson, AZ 85712

Steve Schatzberg
Ventura, CA 93004

Steve Traynor
Minneapolis, MN 55406

Steve Tudisco
Hartford, CT 06105

Steve Underwood
Knoxville, TN 37922

Steven Braun
Chandler, TX 75758

Steven G. Kellman
San Antonio, TX 78231

Steven Goldman
New York, NY 10021

Theresa L. Lianzi
Hollywood, FL 33019

Thomas Windberg
Spicewood, TX 78669

Thomas Windberg
Spicewood, TX 78669

Tim Durnell
Rice, WA 99167

Tim Martin
Woodside, CA 94062

Timothy Foley
Ankeny, IA 50021

Timothy McGettigan
Pueblo, CO 81004

Tina and Tom Jackson
Urbana, IL 61801

Tina Miranda
Minnetonka, MN 55343

Todd Hildebrandt
Elmira, OR 97437

Todd Lee
Asheville, NC 28805

Todd Lockwood
Bonney Lake, WA 98391

Todd Walker
South Milwaukee, WI

Tom Baldwin
Ashland, OR 97520

Stuart Gaffney
San Francisco, CA 94117

Stuart Skadden
Hurley, NM 88043

Sue Christiansen
Iowa City, IA 52246

Sue Gray Al-Salam
Newport News, VA 23601

Sue Reed
Ashland, KY 41101

Sue Rogan
Middleton, WI 53562

Sumner Peirce
Ft. Lauderdale, FL 33309

Tim Duda
San Antonio, TX 78209

Tom Wroblewski
Manorville, NY 11949

Victor Stanley
Joliet, IL 60435

Victoria Guzzardo
Santa Fe, NM 87507

Victoria Potts
Coeur d'Alene, ID 83815

Vidya Sims
Orick, CA 95555

Vincent Patti
Long Beach, CA 90803

Virginia Hadley
Renton, WA 98055

Virginia Gotzmer
Longmont, CO 80503

Virginia Harden
Middletown, PA 17057

Vivian Valtri
Granville, VT 05747

Walter Heberlein
Dunedin, FL 34698

Walter Lee IV
Altoona, PA 16602

Walter McElligott
Beecher, IL 60401

Warren G. Jones
Grafton, WV 26354

Susan Zapolski
Erie, PA 16503

Susanna Orr
Austin, TX 78745

Suzan Bekiroglu
Spring Hill, FL 34607

Suzanne J. Zoubeck
Huntington Station, NY

Suzanne Kaebnick
New York, NY 10025

Sylvia Barnard
Albany, NY 12210

Tacia McIlvaine
Millsboro, DE 19966

Tonia Jauch
Goleta, CA 93117

Tracey Ahring
Dennard, AR 72629

W. M. Wright
Ewing, NJ 08628

Wendy Jaccard
Maurertown, VA 22644

Wilbur Hughey
Des Moines, IA 50313

Willard Garwood
Belleair, FL 33756

William Burks
Birmingham, AL 35206

William C. Briggs, Jr.
Hermosa Beach, CA

William Davis
Bearsville, NY 12409

William Deckard
Eugene, OR 97408

William Epp
Terre Haute, IN 47803

William Kennedy
Kearns, UT 84118

William Visscher
Oakland, CA 94607

Winthrop Southworth
Asheville, NC 28815

Yani Chavez
Miami, FL 33055

Thomas Hooppaw
Chicago, IL 60626

Thomas Knott
Springbrook, PA 18444

Thomas Nelson
Lansdowne, PA 19050

Ti Harmony
Carrboro, NC 27510

Tiffany Formilan
Bergenfield, NJ 07621

Tim Chiavaroli
Floyds Knobs, IN 47119

Twik Simms
Anaheim, CA 92801

Val Sanfilippo
San Diego, CA 92111

Vero Brentjens
Edenton, NC 27932

Vicki Johnson
Kansas City, MO 64137

Vicki Kruschwitz
Waco, TX 76712

Vickie Fouts
Coarsegold, CA 93614

Warren Shufeldt
Springfield, IL 62704

Wayne B. Peters
Greenfield, WI 53220

Wayne Williams
Sherman Oaks, CA

Wendy Lohman
Los Angeles, CA 90024

Wendy Guida
Brooklyn, NY 11215

Wendy Miller
Allegan, MI 49010

Z. Rains
New York, NY 10026

Zachary Kopp
Denver, CO 80218