PMSTPCOL PEmails

From: Harriet Nash
Sent: Wednesday, July 23, 2008 12:20 PM
To: Diediker, Nona H; Paul Kallan; STPCOL
Subject: RE: Draft Scoping Responses (Q4007 Task 1)
Attachments: STP DRAFT SCOPING COMMENT RESPONSES hln.doc

Paul and Nona,

Attached are my comments using the track changes feature. An additional note (probably will be caught when editing): we should consistently use "EIS" or "DEIS" throughout the report. Also, it looks like "Section" should be changed to "Chapter" in many instances.

There are a few places where comment responses state that the comment supports STP Units 3 & 4, but the comment does not even mention anything about support. Also, I combined several comments so that the same response applies to all of them. The responses were the same anyway so the comments should be lumped into the same section for one joint response.

Please let me know if you have any questions.

Thanks,
Harriet

From: Diediker, Nona H [mailto:nona.diediker@pnl.gov]
Sent: Monday, July 07, 2008 8:55 PM
To: Paul Kallan
Cc: William Burton; John Fringer; Harriet Nash; James Biggins
Subject: Draft Scoping Responses (Q4007 Task 1)

Attached is a file containing the draft scoping responses for STP. The number(s) following each comment is a tracking number for individual commenters. They will make sense in the final report, but just ignore them for now. The responses have not been edited for consistency of word usage, so please concentrate on the content of the response, as opposed to the format. But, do keep notes of wording preferences that we can incorporate later for consistency.

It will be most helpful to receive your comments either in a marked-up hard copy or in a Word document using the "track changes" feature.

I will be at the Fermi T-2 the next three days, but will return to the office on Friday. I will be checking email in the evenings.

<<STP DRAFT SCOPING COMMENT RESPONSES.doc>>

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From: Harriet Nash

Created By: Harriet.Nash@nrc.gov

Recipients:
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MESSAGE	1860	7/23/2008 12:19:34 PM
STP DRAFT SCOPING COMMENT RESPONSES hln.doc	400890	

Options
Priority: Standard
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STP DRAFT SCOPING COMMENT RESPONSES

Accidents-Design Basis

Comment: The last analysis of a credible accident was the CRAC II study done while STNP was still under construction. The STNP estimates were: 1. 15,200 early deaths (25 mile radius around plant) 2. 8,770 early injuries (35 mile radius) 3. $112 billion (1980 dollars) With nearly 25 years of sustained population growth in the region, it is certain that these impacts need to be updated. The review in the application is inadequate to inform citizens of the threat. (1710) (1721)

Response: *The environmental review of the STPNOC application will include analyses of both design-basis and severe accidents. The results of these analyses will be included in DEIS chapter 5 that discusses the environmental impacts of reactor operation.*

Accidents-Severe

Comment: LCRA is involved in negotiations with San Antonio to establish long term contracts for interbasin transfers of water. The storage of that water will be in a large open reservoir. The EIS should examine the potential impact on the proposed reservoir of an accident at STNP. (1705)

Comment: The ER analyzes likely dosages to the population and resulting from moderate or severe accidents. It predictable finds that all resulting dosages meet NRC requirements and guidelines. What is lacking, however, is any analysis of the potential health effect impacts of STP 3 and 4 in combination with STP 1 and 2. (1706)

Comment: While I understand that the proposed ABWR is safer than the Chernobyl reactor, it is possible that there could be a meltdown at STP leading to a massive explosion causing a similar nuclear catastrophe. I would like the EIS to show what would happen to the people living in Houston, as well as those who live even closer. How many would die of severe radiation poisoning? A million? How many thousands of square miles of agricultural land would have to be abandoned for years to come? Also what about those living in San Antonio, the tenth largest city in the U.S. What about Austin,TX? As a U.S. citizen, I think an EIS should make these calculations and let the public know. (1707)

Comment: The things I want to see more concern with in the environmental review, in the -- and since this is a scoping hearing, let me say this, you have to consider the worst case scenario. What if something like Three Mile Island happens? What will the effects on this area of Texas be? And that's not even the worst accident that's been known to happen. What if something like Chernobyl happens? I want to see the environmental review include the worst case scenario, the absolute worst that could happen. You'll not find one word about that in the current environmental report. (1736)

Response: *The DEIS for the proposed new reactors will include an evaluation of the risks associated with potential severe accidents including accidents that involve reactor core melts. The evaluation will include estimates of health and economic risks to a distance of 50 miles from exposure to the plume and from exposure to contaminated land and water. These risks will be compared with risks associated with the existing plants. In addition, the evaluation will include an estimate of the cumulative risk of severe accidents for all units at the STP site. This evaluation will be in the DEIS chapter on station operation impacts. Consistent with the general NEPA philosophy that environmental review under NEPA contain realistic estimates of impacts, the Commission in its Safety Goals policy statement (51 FR 30028, 1986) has adopted the use of mean estimates rather than worst case estimates of accident risks.*

Comment: I would point out in a boiling water -- a boiling water reactor is a very robust design. Loss of that piece of equipment [the cooling tower] does not result in a catastrophic event for a boiling water reactor. (1740)

Comment: Nuclear power plants are not safe. Regardless ofthe safety efforts and record of specific nuclear powers plants, the fact remains that there need be only one accident to have a catastrophic result. Nuclear waste poses a real threat since it is generated throughout all parts ofthe fuel cvcle in these power plants. (1715)

Response: *These comments do not provide new information related to the environmental review. They will not be addressed in the environmental impact statement.*

Comment: LCRA is involved in negotiations with San Antonio to establish long term contracts for interbasin transfers of water. The storage of that water will be in a large open reservoir. The EIS should examine the potential impact on the proposed reservoir of an accident at STNP. (1705)

Response: *The environmental impact statement for the proposed new reactors will include an evaluation of the risks associated with potential severe accidents including accidents that involve reactor core melts. The evaluation will include estimates of health and economic risks to a distance of 50 miles from exposure to the plume and from exposure to contaminated land and water. These risks will be compared with risks associated with the existing units. In addition, the evaluation will include an estimate of the cumulative risk of severe accidents for all units at the STP site. This evaluation will be in the DEIS chapter on Impacts of Plant Operation. Consistent with the general NEPA philosophy that environmental review under NEPA contain realistic estimates of impacts, the Commission in its Safety Goals policy statement (51 FR 30028, 1986) has adopted the use of mean estimates rather than worst case estimates of accident risks.*

Comment: The National Environmental Policy Act (NEPA) require that plausible statements as to the prospective environmental impacts be disclosed in advance. Any Environmental Impact Statement that did not raise the twin specters of nuclear core meltdown and a meltdown in a spent nuclear fuel pool is inadequate, and should be challenged in court. (1707)

Comment: Possibly even worse than a reactor core meltdown would be a meltdown in one of the spent nuclear fuel pools. Please give us the effects of that. (1707)

Response: *The environmental impact statement for the proposed new reactors will include an evaluation of the risks associated with potential severe accidents including accidents that involve reactor core melts. The probability of simultaneous reactor accident involving a core melt and a spent fuel pool accident involving a fire is too low to be plausible. Therefore, the environmental impact statement will not address the consequences of simultaneous severe reactor accidents and fuel fires in the spent fuel pool.*

Alternatives-Energy

Comment: The global climate change question discussed above obviously calls into question using any fossil fuel central generators as an alternative. There are numerous other alternatives, however, that are safe and far more benign environmentally. (1705)

Response: *The EIS will be prepared in accordance with 10 CFR 51.75(c). Alternative energy sources will be considered in the EIS and the potential global climate change impacts of fossil fuel generation stations will also be addressed.*

Comment: One of the applicants, CPSEnergy, has reclassified energy conservation as power generation. This essentially treats energy conservation approaches the same as baseload. (1705)

Comment: The alternatives analysis should examine at least the following: 1. Energy efficiency and conservation, such as a. changing building codes that are leading to more energy efficient buildings, b. retrofitting of existing buildings that is lowering their energy consumption c. the redesign of appliances that is leading to replacing older units with more energy efficient units d. the “small is beautiful” alternatives, such as solar powered attic fans e. existing studies by utilities in the service area regarding possible reduction of energy demand through conservation and efficiency. (1705)

Response: *The EIS will be prepared in accordance with 10 CFR 51.75(c). Alternative energy sources, including energy conservation, will be considered in the EIS. Energy conservation will also be considered as part of the need for power analysis in the EIS.*

Comment: The alternatives analysis should look at the rate at which alternatives are coming into use and project both what is likely and what is possible. A secondary question to be anwered is: Taking the same funds as will likely be spent on the nuclear plant and investing those funds in direct or subsidized implementation of alternative strategies, could the same amount of energy be saved and/or generated with far less environmental impact? A related question is: Would investment in the alternative technologies buy

additional time before new generating capacity would be needed, allowing for still further innovative alternatives and improvements in existing alternatives? (1705)

Comment: Alternative energy, such as a. major breakthroughs in solar energy that are lowering the per watt cost to a level competitive with other sources b. new developments in storage which would permit solar and wind energy to be included as base load plants c. scenarios in which solar, wind, biomass and other sources provide most of the baseload with the available natural gas plants filling in as needed. d. wind energy potential, acknowledging that some environmental impacts, such as the impact on birds, must be addressed e. wave energy f. temperature differential energy extraction (ocean) g. biomass as baseload h. previously suppressed technology, such as Tesla coils This list is far from comprehensive. (1705)

Comment: The most obvious irreversible and irretrievable commitment of resources is the money that will be spent on building the nuclear plants that will not be available for implementation of alternative energy strategies. Once begun, nuclear power plants will demand continuing investment and can be expected to absorb a far higher level than presented when the project is being sold to the utility and public. The analysis of this irreversible and irretrievable commitment of financial resources should evaluate the impact of that commitment on the ability to pursue implementation of alternative energy strategies, such as conservation, efficiency, solar, wind, and biomass. (1705)

Comment: [A]n EIS should not only assess the “no action”, “building nuclear plant at Bay City” or “building it somewhere else,” but assess other projects that NRG and CPS could be pursuing to meet their need to sell wholesale power in the first case, and meet the energy demands of its residents in the second. [T]he 2004 KEMA study commissioned by CPS sets out an alternative path for meeting the 40 percent of the plant that CPS has announced they are seeking a COL for. This should be assessed as part of an EIS. (1706)

Comment: If CPS Energy could achieve a better, more cost-effective and environmentally-more-friendly alternative to the proposed nuclear plant, then the EIS should examine that possibility. (1706)

Comment: A coal fire power plant spits out more than four times as much radiation as the average nuclear plant does because of contaminants in the coal. In fact, you could generate more power from coal by removing uranium from it and thorium and burning it in nuclear power plants. There's less environmental damage. The EPA estimates that 30,000 Americans die prematurely every year from the effluent from coal-fired power plants. (1752)

Response: *The no-action alternative, as well as, alternative energy sources will be considered in the EIS. The analysis of alternatives in the EIS will be conducted in accordance with section 102 of the National Environmental Policy Act and 10 CFR 51.75(c).*

Comment: [E]ach application must be carefully reviewed, and all alternatives to the siting of the plants and indeed to nuclear power itself must be considered as part of the EIS process. (1706)

Response: *NRC staff carefully reviews each application it receives by utilizing an acceptance review process to ensure all required components are provided by the applicant. Each application then receives additional scrutiny during the safety and environmental review processes. Examining alternative energy sources and alternative sites is a function of the environmental review process and these topics will be discussed in the EIS.*

Comment: [B]ecause CPS is an applicant, their own study, which shows the potential to economically obtain 1,220 MW of Demand Savings and Technically 1,935 MWs by 2014 alone through a suite of energy efficiency measures - approximately the energy output of one of the units and approximately 40 % of the total capacity of both plants - this ability to obtain the power they say they need through a cheaper and more alternative must be assessed as part of the EIS. (1706)

Comment: CPS has classified efficiency and conservation measures as a source of generating power. And since it's done that, those need to be given over best analysis in the environmental report. (1731)

Comment: I believe CPS should be smarter than nuclear power plants, and they believe that we should be the green generation that think about the future and our health, but also the future generations to come. That is why CPS should invest in solar and wind energy. (1732)

Comment: CPS’s mandate is to serve the energy needs of the greater San Antonio area, and its Strategic Energy Plan identifies energy efficiency as one of its four main tenets. According to its publications, CPS

Energy is “so committed to this goal that energy efficiency is treated as a new resource for electrical generation.” As such, energy efficiency programs are a directly comparable alternative to the electricity that will be generated from STP 3 & 4 and need to be given full consideration in the EIS. (1731)

Comment: A 2004 CPS-commissioned study by KEMA Inc. concluded that it was cost effective for CPS to save 1,200 mW through stronger building codes and retrofitting programs, nearly as much as CPS’s 1,350 mW share of STP 3 &4’s generating capacity, on a comparable if not shorter time scale. Neither this report nor a more recent analysis of efficiency is presented in the permit application. With houses that waste more energy than any other large city in Texas, San Antonio has a huge potential for energy savings from weatherization programs that would contribute to the local economy by lowering family’s energy bills and creating “green collar” jobs in San Antonio. (1731)

Response: *The EIS will take into account the energy conservation and energy efficiency programs offered by CPS Energy.*

Comment: In the case of NRG, nuclear power is not the only option it has as an energy provider. They could - and are - pursuing development of coal plants, but could also be examining demand response and energy efficiency - which because of incentives can earn a provider a profit, on-site and off-site solar, wind, geothermal, biomass and other ways to generate a similar amount of power. (1706)

Comment: There is no analysis of energy efficiency programs, and the solar analysis is based upon 2003 estimates of a cost of 0.108 and 0.187 per kilowatt hour, which are well above recently developed solar projects in California and Nevada. Indeed, the City of Austin has been receiving bids for proposed solar off-site plants that are on the low-end of this range, and recent technological improvements forecast lower solar energy costs over the next five years. An EIS must provide a much more extensive analysis of these alternatives than that provided in the ER. (1706)

Comment: While Chapter Nine does provide some analysis of coal-fired and natural gas plants, and concludes that they are not preferable to nuclear power because largely of the air quality impacts, such a conclusion does not take into account how that compares with the long-term impacts of uranium mining and radioactive waste. Indeed, there is no real comparison between the three choices other than the conclusion that air quality impacts mean nuclear power is preferable. For example, coal, gas - and the alternatives that are never really considered such as energy efficiency, biomass, solar and wind - or some combination of all - are never assessed for the fact that they do not produce radioactive waste in large quantities. (1706)

Comment: In the areas of alternative energy, the EIS should also consider major commitments being made to accelerate the development of alternative, renewable energy. For example, the commitment of Silicon Valley to solar cells is discussed in “Silicon Valley Turns its Face to the Sun” in the New York Times on February 17, 2008. Google intends to spend hundreds of millions of dollars to hire engineers and other experts to develop solar, wind, geothermal, and other renewable resources. Austin Chronicle, February 8, 2008 at 31. (1705)

Comment: Well, let me just say it once again, so it's absolutely clear what we're in favor of. Conservation, renewables and energy efficiency. (1736)

Comment: I moved to Matagorda County in 1997 and I have lived very peacefully with STP down the road, and I have felt very safe. But my problem is, is that I do have a concern about building more nuclear power plants, as opposed to looking for alternative choices, other green choices. Of course, we have this huge yellow ball in the sky that burns us to death every summer, actually from March until like November, which is an endless source of power. (1739)

Comment: As a matter of fact, yes, we need solar, we need wind, we need conservation, we need nuclear, and we need clean coal. We need all of those to meet our energy demands. Energy is what drives the economy of Texas, it's what drives the economy of the world. It's important, we need to plan for that energy. If we don't, we'll go, as an economy, down the hill. (1740)

Comment: Yet there are three studies not referenced in this most recent submission by NRG to you all that have been done in the last several years. One on San Antonio in particular that said we could save more than 1200 megawatts, far more than CPS's share of this plant, if we did energy efficiency at costs less than building this plant. Another by Optimal Energy that said that the state could save 80 percent of the energy -- the growth in demand for energy that this plant is designed to meet. And yet another most recently by AC Triple E indicating that we could save between 75 percent of the growth in demand for energy, and 101

percent of the growth in demand for energy in either the Houston or Dallas areas respectively, by using energy efficiency as our first resource, along with other resources like combined heating and power, and renewable energies. (1721)

Comment: And I also think that if we're going to really analyze the power demands of -- that may be needed by these new plants, we've also got to look at the cities like San Antonio, like Austin, that may be investing in the plant and see -- look at how they meet their energy demands and whether they could be getting their energy in a cheaper, cleaner and faster manner. (1706)

Comment: -- let's make sure we look at all the choices. If the choice is this new nuclear plant, or concentrated solar power and efficiency, which really makes the most sense. And I hope, frankly, that NRG and the other investors are looking at all the options that are out there on the table, some of which I think could be used in Matagorda County. (1706)

Comment: Now I understand that our energy needs here in Texas are growing. However, there are alternatives to nuclear power here in Texas, which are cleaner, more affordable, and more sustainable ways of powering our needs for the future. Alternatives include energy efficiency, solar power, wind, combined heat and power, and more. In addition, just not too long ago Optimal Energy discovered that 80 percent of our energy needs could be met by these technologies. (1730)

Comment: We can also talk about alternative power and how there's no disposal plant for solar collectors. It might surprise a lot of you to understand that the incredible chemical mix that's in solar panels, including arsenic. The burden on the environment with arsenic, which, by the way, has an infinite half-time -- not a 100,000 years, but infinite. (1752)

Comment: If you look at the carbon footprint of the life cycle of the nuclear power's life cycle from the mining of the uranium all the way through the disposal of the waste that carbon footprint is the equivalent and the same footprint for solar and for wind and for hydro. (1741)

Comment: [T]he land for these reactors [units 3 and 4] exists. Installation of the equivalent capacity [of solar and/or wind alternatives] -- and, again, I think when these alternatives and proposed actions are evaluated they've got to be done on an equivalent basis. So I think that installation of alternatives has got to be the equivocal capacity to what the proposed action for the nuclear plants will be. (1714)

Comment: I'm thinking primarily of wind and solar [energy alternatives], which would I think require large areas of land -- primarily the agrarian areas -- out in west Texas. I think the EIS needs to determine whether installation of these alternatives -- and I'm thinking about Fort Stockton -- the wind farms out there -- of Big Spring just off of I-20, and if you go up to Sweetwater and over across I-20 to Spider there are hundreds of windmills up there. So the EIS I think needs to evaluate installation of either wind, solar, whatever, and determine if there are any impacts -- primarily impacts on land usage, ecology, wildlife, other natural resources. (1714)

Comment: And as a third generation Matagorda County resident I understand the concerns and -- that we have about nuclear power. But I also understand the huge drawbacks that we're having today with our continued overuse of fossil energy. We as a county, of course, a state and nation need to look at solar, wind, bio, and, of course, nuclear energy for our future. (1745)

Comment: This area has offshore wind, and there is a small town mayor in west Texas named Sherry Phillips. I heard her say the same things -- that when wind energy came to their community for the first time their kids could come home. They could live and work in the community. They could run cattle underneath the wind turbines. That's a possibility for this community as well. And I urge NRG to seriously consider that path.

Comment: Why do we consider such a costly, potentially destructive, and unnecessary project instead of employing more benign solutions such as conservation, wind, and solar? (1709)

Comment: I am writing to express my concern about the proposed expansion of the South Texas Nuclear Power plant (Federal Register! Vol.72, No. 245/ Friday, December 21, 2007/Notices Page 72775). As a resident of Houston, just to the north of this plant, I would like to know why this expansion has been proposed rather than expansion of our state's enormous potential for wind energy. (1711)

Comment: Texas needs more non-polluting sources of electricity such as wind and solar. Utilities also should promote energy conservation as a way to avoid new construction of power plants. (1712)

Comment: The land for the proposed reactors exists. Installation of the equivalent capacity of solar and/or wind altematives will require immense areas of agrarian lands in West Texas. The EIS should evaluate wheter installation of equivalent capacity of these altematives would negatively impact land use, ecology. wild life, or other natural resources. (1714)

Comment: The clear alternative to coal and nuclear power plants is renewables: wind, sun, water, and geothermal. These technologies are on the horizon. Venture capitalists are presently investing in the development of the necessary technology to make these renewable sources of energy practical on a nationwide basis. According to a recent analysis by The National Renewable Energy Laboratory (NREL) - the country's primary research and development facility for renewable technology - "the entire U.S. electricity demand could technically be met by renewable energy resources by 2020. In the longer term, the potential of domestic renewable resources is more than 85 times current U.S. energy use." (1715)

Comment: [A]ccording to the November 5, 2007, U.S. News and World Report cover story, "Power Revolution," one of the most promising renewable energy sources is geothermal, which taps into Earth's steady, reliable warmth. According to this article, recent studies show that techniques developed in the oil industry can be used to release geothermal energy three or more miles underground. (1715)

Comment: We are concerned by the inadequate inclusion of the public in the decision by our public utility CPS Energy to construct two new nuclear reactors at the South Texas project (STP) and the total lack of an assessment of alternative ways to meet San Antonio's energy needs in the Environmental Impact Statement (EIS) as required under the National Environmental Policy Act. As the ratepayers that will finance this project, we have a right to a full and transparent assessment of alternatives. (1731)

Comment: The EIS needs to include a thorough analysis of alternatives specific to meeting San Antonio's energy needs that includes proactive weatherization and retrofitting programs, stronger building codes, combined heat and power or cogeneration strategies, renewable energy production, and combinations thereof. This analysis needs to receive as much consideration in terms of technical expertise, time and financial investment as the proposed new nuclear reactors have received. (1731)

Comment: STP 3 & 4 would be a huge financial investment for San Antonio ratepayers and will with all likelihood greatly overrun initial cost and time projections, preventing CPS from making large scale investments in efficiency and a renewable energy future. We deserve a full analysis of those different futures, free of radioactive waste, the pollution associated with uranium mining and enrichment, weapons proliferation, and the danger to public health and the environment from leaks and accidents at STP, before this project progresses any further. (1731)

Response: *The EIS will be prepared in accordance with 10 CFR 51.75(c). Alternative energy sources, including energy conservation and renewable energy sources, will be considered in the EIS.*

Comment: A CPS commissioned study, this was mentioned before, the CIMA report, concluded that 1200 megawatts of energy could be saved through stronger building codes and retrofitting programs. That's 80 percent of the half of STP reactors 3 and 4 energy that we are going to be supposedly getting. And that report is nowhere mentioned in this environmental report. So this STP application needs to include a real analysis of alternatives, and all the alternatives for meeting San Antonio's energy needs. (1731)

Comment: In trying to look through the thousands of pages of this permit application, I realize that the entire scope of the environmental review was based on, and this is a quote, "that the purpose of the project is to sell base-load power on the wholesale market." And the only alternatives to this project that were looked at were alternatives for meeting that mission. But the fact is that that is not CPS Energy's mission. CPS Energy's mission, as a public utility, is to provide for the energy needs of San Antonio, and the other small areas that it covers and serves. (2123)

Response: *The EIS will take into account the mission of CPS Energy including the energy conservation and efficiency programs offered by CPS.*

Alternatives-No-Action

There were no comments for this heading.

Alternatives-Sites

Comment: The analysis of choosing an alternative site - such as NRG's land owned in Limestone County - concludes that the existing Matagorda County [STP] site is preferable but is based largely on the possibility that additional transmission lines would be needed at the Limestone County site. The analysis seems too simplistic. (1706)

Response: *The EIS will include a more detailed~~n~~ analysis of siting the proposed nuclear generating units at alternative sites located within the applicant's region of interest.*

Alternatives-System Design

Comment: [T]he large cooling pond you see at South Texas, that 7,000-acre reservoir, is used for cooling the main turbine. It's the main heat sink for the plant as the plant is in operation. Provided in Unit 1 and 2 is a pond for providing for emergency cooling should that be required. Unit 3 and 4 will actually have a cooling tower for emergency cooling for what we call the ultimate heat sink. ... it's not one of these monster hyperbolic towers like you see in all the pictures that one associates with a nuclear plant. These are small towers, more akin to what you see out behind a large commercial building that provided for air conditioning. (1740)

Response: *This comment provides some information regarding the cooling system in use for STP Units 1 and 2 and the ultimate heat sink cooling towers proposed for STP Units 3 and 4. No response is needed.*

Comment: They have a giant cooling pond out there. Depending on which part of that COLA you read, they're either going to use cooling towers -- four-strap cooling towers on Units 3 and 4 or they're going to use the cooling pond itself. I'm not sure which one it is. (1749)

Comment: Speaking about the cooling link, what part of makeup requirements are going to be for both instances or decide which one you're going to use and tell us that one. (1749)

Response: *The Main Cooling Reservoir serves as the heat sink during normal operation of STP Units 1 and 2 and ~~will~~ would operate similarly for STP Units 3 and 4. The make-up water for the reservoir is obtained from the Colorado River. The cooling towers for STP Units 3 and 4 ~~are~~ would be part of the ultimate heat sink that would provide~~s~~ cooling for safety-related systems and components during normal and accidental conditions. The cooling water required for the ultimate heat sink cooling towers ~~is~~ would be stored in basins beneath the towers and make-up water to these basins ~~will~~ would be provided by on-site water storage basins that contain 30-day supply of make-up water. Make-up water to the on-site water storage basins ~~will~~would be provided by groundwater. A detailed description of the cooling system for STP Units 3 and 4 will be presented in Chapter 3 of the EIS.*

Benefit-Cost Balance

Comment: Another framing of the environmental analysis is whether the investment required to bring the nuclear plant to completion, including waste disposal and decommissioning, will foreclose investment in alternative paths toward saving or producing the same amount of energy that would have far fewer environmental impacts. (1705)

Response: *The NRC does not have authority or responsibility by law or regulation to ensure that the proposed plant is the least costly alternative to provide energy services under any particular set of assumptions concerning future circumstances. This authority and responsibility is most often the role of state regulatory authorities such as public service commissions, or in the case of merchant plants, the competitive marketplace. The EIS ~~does~~ will consider the potential for alternative non-nuclear technologies to provide the electricity that could be generated by the proposed plant and their environmental impacts. The potential effect of a particular nuclear power investment on the future development and implementation of alternative technologies is speculative and beyond the scope of the EIS.*

Comment: [B]ecause the City of Austin hired a consultant to study the NRG and CPS proposal and found that the risk of investing in the application process outweighed the benefit because of the potential for the cost of the construction and licensing to exceed the estimates provided by the applicant by $1 billion, this analysis must be included as part of the discussion of alternatives. (1706)

Comment: Failure to provide financial information needed for true alternative analysis: the applicant has asked for and the NRC has granted an exemption to disclosing basic financial information about the proposal. Thus, in Chapter 1 of the COL application, tables [1.3-1 through 1.3-9] have been declared proprietary and thus unavailable for public review. The reason that project cost, construction funds, O & M costs and plant performance are an environmental issue is because NEPA requires an analysis of alternatives to the proposed action, and without cost figures and analysis of the construction and O & M costs, it is impossible to know if the energy demand needed could be more cost-effectively be achieved through other means, or with construction of a nuclear plant at another site. (1706)

Comment: It is also difficult to assess whether the plant would generate the monies needed for ongoing repairs, the ability to respond to emergency situations, and the ability to provide decommissioning costs without a financial analysis. Even assuming that EPA and NRC have the needed financial information provided by the applicants to assess these issues, it will be difficult as a member of the public to add to the discussion through the draft EIS process without making at least basic financial information disclosed. (1706)

Comment: The lack of financial information - at least publicly available - also makes it difficult to assess Chapters 8, 9 and 10 of the applicants Environmental Report. (1706)

Comment: [The EIS] also needs to incorporate the true costs of nuclear power. And if it did, there's no way that nuclear power would come out on top. There's reasons why no nuclear reactors -- the construction of nuclear reactors has not been permitted in 29 years, despite that fact that it's the most government subsidized energy source of all. And one of the reasons why the true costs of nuclear are never evaluated is because NRC only looks at a small price. The fact is that the construction of new generators is -- and the speculation about the construction of new generators, is already driving up the price of uranium, which means communities are fighting tooth and nail right now to prevent new uranium mining permits from being issued in South Texas. That is an environmental impact of the South Texas Project. (1731)

Comment: We get no cost figures out of that COLA -- none. Everything is proprietary. That's nonsense. I can get cost figures on ones that they haven't even put applications in on. And in some cases they've already decided it costs too much. The one thing that would kill this -- and it won't be guys like me -- is money. And if we don't know what's going on we'll never know, will we? (1749)

Comment: Nuclear power is not competitive with other forms of power generation and requires taxpayer dollars to subsidize. (1709)

Comment: Nuclear power still requires Federal subsidies to make it competitive with other forms of power generation. (1712)

Comment: As one leading advocate for green technology puts it: "Any state that allows the construction of new nuclear power plants in the face of today's global industrial competition and financial turmoil will be committing economic suicide.- (Harvey Wasserman, Testimony to the Public Utilities Commission of the Ohio House, January 30, 2008). (1715)

Comment: Nuclear power plants are not cost effective. Nuclear power plants have required exorbitant cost overruns, are dependent on massive federal subsidies, and need continual expensive maintenance. Cost to taxpayers is extreme. (Southwest Workers' Union April 25, 2007). (1715)

Response: *The applicant is entitled by 10 CFR 2.390 that trade secrets and commercial and financial information be held by NRC as privileged or confidential, subject to certain procedural controls. The Commission also determines whether the right of the public to be fully apprised as to whether the bases for and effects of the proposed action outweighs the demonstrated concern for protection of a competitive position, and whether the information should be withheld from public disclosure. The NRC has determined that the requested financial information shall be held as confidential. The comparison of alternatives in the EIS is an environmental comparison, not a financial one.*

Comment: The intergenerational aspect of producing high level waste for every generation coming after us so that we can have supposedly cheaper electricity should be a part of the analysis of unavoidable impacts of pursuing the project. (1705)

Comment: You know, as a young person I wonder why we are putting so many money and energy into this when in the last 50 years the nuclear problems have not even been solved. (1729)

Response: *The EIS will discuss the provisions made for the existing and new generation reactors for long-term storage of spent fuel. The U.S. Nuclear Regulatory Commission's Waste Confidence Rule, found in 10 CFR 51.23, states: The Commission has made a generic determination that, if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation (which may include the term of a revised or renewed license) of that reactor at its spent fuel storage basin or at either onsite or offsite independent spent fuel storage installations. The current rule covers new reactors and applies to the staff's review of an early site permit or a combined license application. The Atomic Safety and Licensing Board presiding over the proceeding on the Grand Gulf early site permit application affirmed that the Waste Confidence Rule and its subsequent amendments clearly include waste produced by a new generation of reactors. The total life cycle costs of the system, as estimated in 2001, were $57.8 billion.*

Comment: Given that the applicant in the application makes it clear they will rely on the federal Department of Energy guarantees to peak interest in capital investment markets, the financing of the project would seem a reasonable area to be investigated as part of the EIS. If the financing for the project does not work, there is the potential to have the project stalled, which could have environmental impacts. (1706)

Response: *The benefit-cost balance for the project will rely on the best available estimate of project timing and duration and will note any uncertainties in the analysis.*

Comment: CPS provides my residential electricity at a cost much lower than the national average. My suspicion is that that's due in a large part to the operation of the nuclear plants. My own residence bill is about $35 a month lower than this national average. 35 bucks a month doesn't sound like much, but over the course of a year I think that's a pretty good piece of change. So I think that the proposed action and the alternatives need to consider this and be able to meet this type of a requirement. If they can't then the EIS should go into the impacts -- the negative impacts – socio-economic impacts on the residents and the businesses in San Antonio. (1714)

Comment: CPS Energy provides residential electricity at a cost much lower than the national average. My own residence bill is about $35 a month less than the national average. The EIS should evaluate whether the proposed action and altematives will improve or retain this low cost, and if not evaluate negative socioeconomic impacts. (1714)

Response: *The purpose of the environmental impact statement is to disclose potential environmental impacts of building and operating of the proposed nuclear power plant. The determination for the impact of building and operating a nuclear power plant on retail power rates is not under NRC's regulatory purview.*

Comment: And yet we have this thing that says we won't have foreign ownership. Well, I'd like to know how you're going to do it without it. And I'd like to see the justification for that in the environmental impact statement. (1749)

Response: *The purpose of the environmental impact statement is to disclose the environmental impacts of the proposed nuclear power plant. The applicant is a domestic U.S. corporation. Moreover, the ownership of the plant is not expected to have a bearing on any environmental impact and therefore is not a relevant topic for the EIS.*

Cumulative Impacts

Comment: And very important when we're looking and talking about the environmental impact statement, is that we also take into effect, into consideration, the cumulative impacts that folks have to deal with when we talk about pollution, when we talk about environmental contamination. ...And if you look at the Gulf Coast of Texas, it's littered with chemical plants, it's littered as well with refineries and ports, and huge inland ports as

well that are situated for ships to be able to come in. So if we're looking at ourselves here and in San Antonio, what is the whole of the impact that we've being exposed to? (1726)

Comment: [I]f we look at the State of Texas, we rank number seven amongst countries in pollution. As one state, we're surpassing what countries are producing in pollution. So we have to be looking at reducing that amount of pollution here within the State of Texas, reducing the impacts that communities are feeling by living around these polluting industries. (1726)

Response: *NEPA requires the analysis of cumulative impacts in an environmental impact statement. The cumulative impacts associated with the construction and operation of the proposed Units 3 and 4 will be evaluated and the results of this analysis will be presented in Chapter 7 of the EIS.*

Comment: [T]he analysis of the Matagorda [STP] site never acknowledges or assesses the degree to which siting a new nuclear plant next to an existing plant might present potential problems. Thus, what might the impact of a leak or problem at the existing STP No. 1 and 2 present during the construction or operation of No. [3] and 4? Could a problem at the new plant lead to a shut down or problem with the existing plants? (1706)

Comment: Is there an environmental impact by placing so much power, and so much waste in the same physical location, subject to an increased likelihood that a natural, operational or terrorist attack could have an even larger impact than if a nuclear plant were to be located, for example, at the site in Limestone County? Is it safer, in other words, to separate an aging and new plant? (1706)

Comment: When you consider that this plant would be -- if it goes through -- having construction right next door to an operating nuclear plant, you're introducing circumstances that haven't been seen before. (1722)

Comment: I think that FEMA should be present for a safety hearing and the Department of Homeland Security. And I would like to hear how all of those agencies are, in fact, working together to assure safety. This is no small thing to have a construction site next to an operating nuclear plant. It deserves close scrutiny. (1722)

Comment: We did not see anything that had to do with coincidental unit problems. If we have a problem on Unit 1 and 2 during construction on 3 and 4 what's going to happen about that? If we have a problem on 3 and 4 during the operation of Unit 1 and 2 and it affects Unit 1 and 2, what will happen with that? This works very strongly in things like low-pressure turbines coming apart. They just rebuilt the low-pressure turbines. Why? They obviously weren't really happy with its performance at that point, and that was done as a preventive measure. (1749)

Response: *These comments address issues related to co-location of two or more nuclear power plants. Several aspects of these issues will be addressed in the DEIS. The DEIS will address the doses to construction workers from the existing units, and from Unit 3 after it starts operation. The DEIS will also address cumulative radiological impacts of normal operation and cumulative risks of severe accidents. Other aspects of these issues, which are addressed in the emergency plan that has been submitted as part of the application, are out of the scope of the environmental review and will not be addressed in the DEIS.*

Decommissioning

Comment: Additional radioactive waste is produced in terms of the irradiated structures and equipment in the nuclear plant. A comprehensive examination of the likely method of decommissioning should also be part of the EIS. (1705)

Response: *Decommissioning will be discussed in chapter 5. The environmental impact from decommissioning a permanently shutdown commercial nuclear power reactor is discussed in Supplement 1 to NUREG-0586, Generic Environmental Impact Statement on Decommissioning of Nuclear Facilities, which was published in 2002. For most environmental issues, the impact from decommissioning activities is considered small.*

Ecology-Aquatic

Comment: As evidenced in the Environmental Report itself, low-flow conditions move the line of salinity upstream from Matagorda Bay, leading to more entrainment and entrapments of estuarine species, as well

as the likely movements of bird species such as pelicans which feed on such aquatic species. Thus, the relationship between the salinity line, aquatic species and climate must be examined. (1706)

Response: *The DEIS will consider the aquatic biota in the Colorado River, including species that move up the river from Matagorda Bay. ~~Current monitoring of the Colorado River will provide~~Recent data collected in the lower Colorado River will be used to characterize the aquatic biota~~,~~ as well as~~,~~ various water quality indicators (including salinity) that will be used to describe the aquatic environment and analyze potential impacts from the project. Entrainment, entrapment, and impingement of the aquatic biota in the river at the vicinity of the plant's intake structure will be evaluated in ~~Section~~ Chapter 5 of the DEIS. Additionally, expected behavioral changes in other species, including avian species such as pelicans, resulting from proposed construction and operation of the additional units will also be analyzed in Chapter 5 of the DEIS.*

Comment [hln1]: We also need to add a statement to address how/whether we will address the relationship among the salinity wedge, aquatic species, and climate.

Comment: It should be noted that the ER relies heavily on monitoring data of aquatic species and water levels from the initial application of 1973 which must be updated to reflect a much more saline, lower flow regime which typifies the region today. (1706)

Comment: In terms of the assessment of water contained in the ER, there are multiple sections which continue to rely on dated aquatic monitoring of the Colorado River which must be updated and specified as part of an EIS. Thus, as an example, relying on histograms of sediment levels in the Colorado River from 1957 to 1973, as is done in Section 2.3.1.1.5 is clearly incomplete. (1706)

Response: *The DEIS will include the results of a ~~2007 twelve~~12-month monitoring program conducted in 2007 and 2008 to assess~~of~~ aquatic species and conditions of the lower Colorado River ~~from the Gulf Intracoastal Waterway to upstream of the STP site~~.*

Comment: I know that more than half (by weight) of the biomass in the earth is in the form of microorganisms which live under the surface of the earth and bodies of water. The earth is teaming with life to depths below 10,000 feet, especially in coastal plains such as found around STP. Some of these organisms have beneficial effects on the biosphere, e.g., producing oxygen and absorbing carbon. I am concerned about the effect on these organisms which would result from a massive radioactive effluent leak into the ground, or cooling pond, or the Colorado River. An EIS should consider this important effect. (1707)

Response: *NRC regulations require strict monitoring of radioactive effluent releases. In addition, new plants are commonly required by other State or Federal agencies to perform special monitoring of aquatic and terrestrial species for some period of time after a new plant commences operation. Ecological impacts related to radioactive effluent releases from the proposed facility will be evaluated in the DEIS.*

Comment: I had an opportunity one night working nights to go out and work where the pumps are out on the reservoir. And I walked out and I looked down and I said, Geez, as a fisherman here are these huge catfish and these huge red fish swimming together down there. Now, at -- the environment -- if they're doing something about the environment they're making the fish grow big. I can tell you that. (1745)

Response: *The DEIS will discuss the aquatic resources at STP in Section 2 and will consider potential impacts from construction and operation of the two new units in Sections 4 and 5, respectively.*

Comment: We need to figure out whether we're going to preserve that estuary or whether we're going to let it go to hell. Right now I understand that at the intake for the cooling plate we're getting brackish water. The original design was that they were not to remove enough water such that there was back-flow to cause saltwater in at the inlet station. It appears it's happening regardless of whether they pump or don't pump. This says there's been a change in the basic environmental impact statement. That needs to be analyzed for. (2123)

Comment [hln2]: Is this a transcription error? Suggest "pond" or "cooling the plant"

Response: *The DEIS will describe the function of the intake structure on the Colorado River and will discuss the potential impacts to aquatic resources from the operation of that structure. The DEIS will also describe changes that have occurred in the lower Colorado River unrelated to operation of STP Units 1 and 2; such changes have occurred since the publication of NRC's final environmental statement for existing units.*

Ecology-Terrestrial

Comment: In the last 20 years that the nuclear power plant has been here the National Audubon Society, year in and year out -- I don't know if you all know this but Matagorda County is the number one birding center in the nation -- more birds -- more species of birds every year. They just did the Christmas bird count -- number one in the nation again this year -- more species of birds in Matagorda County. (1745)

Comment: [T]he lake that [STP has] -- the 7,000 acre -- also creates some of the best bird habitats in the state of Texas. (1718)

Comment: [R]ecently I had the opportunity to go and sit on a pier and watch my brother fish and a friend of his. ... So we sat for a time. And as we did, as the conversation waned, I heard something. And the longer you listened, the louder it got. And that that I was hearing were frogs: frogs that were speaking loudly. And if you know anything about frogs, they're the most -- or one of the most sensitive animals in our environment. And they were not only loud, but they were interactive. And I came to understand that as sensitive an issue as this is the creatures of the world tell us a lot. And for them to be out in such a large and strong body to be heard at night, and them being such a sensitive creature that they through their skins osmose anything the environment deals to them, their presence made me understand that we have a very environmentally safe -- not just our nuclear facility, but numerous facilities that operate along our river -- something I'm very proud of in our county -- something they should be proud of, and I think everyone should be well aware of. (1744)

Comment: Also the alligators -- the nuclear power plant is -- the whole grounds -- in a protected wildlife zone. They've not only done that, they've gone in and put in a -- what's called a wetlands -- their own private wetlands so, you know, to help that. (1745)

Response: *The comments ~~is~~are noted. ~~and generally supports STP Units 3 and 4~~. Terrestrial resources, including birds and frogs, will be discussed in Chapter 2 of the DEIS.*

Comment: What about endangered species? There are kemp ridley turtles, whooping cranes, and others that are on the threatened and endangered species list in this community. Many of them we are beginning to understand how significant they are since they last time this plant was permitted in this community. (1721)

Comment: There are Kemp Ridley sea turtles and whooping cranes in the vicinity. How will construction and operation of the new reactors affect their habitats? What other species will be affected? (1710) (1721)

Response: *The comments relate to aquatic and terrestrial ecology issues and will be considered in the preparation of the DEIS. NRC's consultations with the National Marine Fisheries Service and the U.S. Fish and Wildlife Service ~~(FWS)~~ regarding threatened and endangered species will be discussed in Chapter 4 of the DEIS.*

~~**Comment:** What about endangered species? There are kemp ridley turtles, whooping cranes, and others that are on the threatened and endangered species list in this community. Many of them we are beginning to understand how significant they are since they last time this plant was permitted in this community. (1721)~~

~~***Response:** The comments relate to aquatic and terrestrial ecology issues and will be considered in the preparation of the DEIS. NRC consultation with the U.S. Fish and Wildlife Service (FWS) regarding threatened and endangered species will be discussed in Chapter 4 of the DEIS.*~~

~~**Comment:** [T]he lake that [STP has] -- the 7,000 acre -- also creates some of the best bird habitats in the state of Texas. (1718)~~

~~***Response:** The comment is noted. Terrestrial resources will be discussed in Chapter 2 of the DEIS. The comment supports STPUnits 3 and 4.*~~

~~**Comment:** [R]ecently I had the opportunity to go and sit on a pier and watch my brother fish and a friend of his. ... So we sat for a time. And as we did, as the conversation waned, I heard something. And the longer you listened, the louder it got. And that that I was hearing were frogs: frogs that were speaking loudly. And if you know anything about frogs, they're the most -- or one of the most sensitive animals in our environment. And they were not only loud, but they were interactive. And I came to understand that as sensitive an issue as this is the creatures of the world tell us a lot. And for them to be out in such a large and strong body to be heard at night, and them being such a sensitive creature that they through their skins osmose anything the environment deals to them, their presence made me understand that we have a very environmentally safe --~~

not just our nuclear facility, but numerous facilities that operate along our river -- something I'm very proud of in our county -- something they should be proud of, and I think everyone should be well aware of. (1744)

Response: *The comment is noted. Terrestrial resources will be discussed in Chapter 2 of the DEIS. The comment supports South Texas Units 3 and 4. The comment provides no new information and, therefore, will not be evaluated further.*

Comment: Also the alligators -- the nuclear power plant is -- the whole grounds -- in a protected wildlife zone. They've not only done that, they've gone in and put in a -- what's called a wetlands -- their own private wetlands so, you know, to help that. (1745)

Response: *Terrestrial resources will be discussed in Chapter 2 of the DEIS. The comment provides no new information and, therefore, will not be evaluated further.*

Comment: There are Kemp Ridley sea turtles and whooping cranes in the vicinity. How will construction and operation of the new reactors affect their habitats? What other species will be affected? (1710) (1721)

Response: *The comment relates to aquatic and terrestrial ecology issues and will be considered in the preparation of the DEIS. NRC consultation with the U.S. Fish and Wildlife Service (FWS) regarding threatened and endangered species will be discussed in Chapter 4 of the DEIS.*

Environmental Justice

Comment: Environmental justice, what will the net impact be on your taxes and the community, the low-income communities of color? (1721)

Response: *This comment asks what the impact on local taxes and on communities of color will be from constructing and operating the proposed plant. Both types of impacts will be considered and discussed as part of the socioeconomic and environmental justice impacts, respectively.*

Geology

Comment: We may have a problem with soil subsidence. Not too far away from the existing site, on the other side of Highway 60, there is an old Texas Gulf sulphur site at Gulf. Sulphur was mined out of there for many, many years. The site was finally abandoned. The company moved north out of the county in the area between Highway 60 and Bowling. About five years after I moved down here in 1983, that highway fell down into the ground -- a sinkhole. That was caused by that sulphur mining that was going on at a place called Newgulf. Is this a possibility for the old Gulf site? Would this offer some compromise to the ultimate heat sink or cooling pond? (1749)

Response: *Geologic impacts on the proposed facility from off-site actions are in scope of the safety analysis and will be addressed in the FSAR issued and maintained by the applicant and SER issued by the NRC. The topic of subsidence and sink holes and their potential impact on the proposed facility will be addressed in Section 2.5 of the FSAR. This comment is out of scope with regard to the EIS.*

Health-Non-Radiological

There were no comments concerning this category.

Health-Radiological

Comment: There is a need for measurements on the amount of radioactivity in the water currently flowing from the plant into Matagorda Bay to determine whether there is any leakage or release of any kind. If there is documentation of such leakage, that potential from two additional reactors should also be evaluated. (1705)

Response: *STP has an ongoing Environmental Monitoring Program which does monitor for radionuclides in surface water, groundwater and drinking water on an annual basis. Tritium is the only anthropogenic radionuclide that has been measured in onsite water sample for the past several years. No radionuclides*

have been detected in offsite water samples. During 2006 there were two occurrences of the Total Dissolved Solids discharge line leaking some liquid. The water from the leaks was recovered. No radioactive material was released from the site. However, the potential for releases will be discussed in EIS section 5.

Comment: Prior to STNP Units 1 and 2 going into operation, the public health data for the three counties closest to the site showed a cancer death rate 4.5% lower than the statewide rate. In the 16 years since the nuclear plants began operating, the cancer death rate in the three counties rose to more than 7% higher than the statewide rate. The statewide rate both went up, with the three county rate rising four times faster. There is no obvious reason, other than the presence of operating nuclear power plants, explaining the data from the three counties. Based on this data, an increased cancer death rate would be expected to result from the addition of two more operational reactors at the same site. The cumulative impacts analysis for the STNP II reactors should address this question. Source: Joseph J. Mangano, MPH, MBA Radiation and Public Health Project, January 24, 2008. There is also a recent study indicating that operating nuclear power plants adversely affect infant mortality (1705)

Response: *Cumulative impacts will be discussed in section 7 of the EIS.*

Comment: There have been numerous cancer studies and infant mortality studies involving nuclear plants that should be examined as part of the EIS. While some of these studies have been contradictory, a true ER and EIS process must assess the latest studies to estimate the actual damages in cancer incidence and death due to the opening of more nuclear power plants. (1706)

Comment: What will the impact of cancer be on this community? And if you look at data you see that the cancer rates have gone from below average to above average since this plant's been in operation. (1721)

Comment: I do want to go on record and say that I am concerned about increased cancer rates (1733)

Comment: ... a large-scale, carefully conducted study concluded: "Our study confirmed that in Germany a connection has been observed between the distance of a domicile to the nearest nuclear power plant... and the risk of developing cancer, such as leukemia, before the fifth birthday." The study was conducted by the German Register of Child Cancer, an office which is funded by the 16 German states and the Federal Health Ministry. Among several alarming and unexplained findings was that 37 children living within 3 miles of nuclear power plants had come down with leukemia between 1980 and 2003, whereas the statistical average for Germany would have predicted just 17 cases In that group. Of course, additional research, which takes time, must be done to determine whether proximity to nuclear plants was a factor in causing the high number of cases. At this time, scientists can only conclude that this is just "another piece in a growing puzzle'" of childhood leukemia's association with nuclear installations and they emphasize the need to keep investigating. We all know that there are risks to almost everything we do in life and that there is no escaping some hazards. However, in the case of granting nuclear power plant expansion, the risk is too high. (1717)

Response: *As will be discussed in the EIS, the staff accepts the linear, no-threshold dose-response model. In a recent report entitled "Health Risks from Exposure to Low Levels of Ionizing Radiation: BEIR VII - Phase 2 (National Research Council 2006), the BEIR VII Committee concluded that the current scientific evidence is consistent with the hypothesis that there is a linear, no-threshold dose-response relationship between exposure to ionizing radiation and the development of cancer in humans. Having accepted this model, the staff does think that this model is conservative when applied to workers and members of the public who are exposed to radiation from nuclear power plants. This is based on the fact that numerous epidemiological studies have not shown conclusive evidence of increased incidences of cancer at the low dose rates typical of nuclear power plant operations. Further, routine releases from operating nuclear power plants are far below the level at which regional excess cancer incidences would be expected. These studies include: (1) the National Cancer Institute study (1990) of cancer mortality rates around nuclear facilities, including 52 nuclear power plants, (2) the University of Pittsburgh study (Talbott, et al. 2003) that found no link between radiation released during the 1979 accident at the Three-Mile Island nuclear power station and cancer deaths among residents, and (3) the Connecticut Academy of Sciences and Engineering study (2001) that found no meaningful associations from exposures to radionuclides around the Connecticut Yankee nuclear power plant that ceased electricity production in 1996 to the cancers studied. Radiological Health Impacts to the public will be addressed in Section 5 of the EIS.*

Comment: I read a story on the front page of the New York Times two days ago, and ...he discovered that his drinking water was contaminated with radioactive tritium. That's ionizing radiation, not the kind of radiation you get from the sun. And he was naturally upset about that, and went to Exelon, the largest nuclear reactor manufacturer in the country, and he asked them about it, and to make a long story short,

they confessed that they knew about this. Exelon believed that the tritium found in the drinking water well near the plant in Braidwood, Illinois came from millions of gallons of water that had leaked from the plant years earlier, but went unreported at the time. That could be happening right here. That concerns me. That bothers me. (1734)

Response: *STP has an ongoing Environmental Monitoring Program which does monitor for radionuclides in surface water, ground water and drinking water on an annual basis. Tritium is the only anthropogenic radionuclide that has been measured in onsite water sample for the past several years. No radionuclides have been detected in offsite water samples. Drinking water in the area is obtained from deep aquifer wells, which is also monitored quarterly and no tritium has been detected in this water.*

Comment: There was a comment earlier regarding cancer and radiation in the populations living near nuclear facilities. It's interesting because that question's been around a long time. In the 16 years I've been [the site doctor] at STP, the evolution of the answer has been ongoing. And I think it's time, finally, to put that question to bed, because it's been studied massively, and internationally. National Academy of Sciences, National Cancer Institute, long-term big-time studies, quality research that have concluded, unequivocally, that living in the shadow of a nuclear plant will not give you cancer. So we need to put this to bed. These are American studies, British studies, Canadian studies, and, again, it's good reading. So take it home. There's some real issues to deal with here. This is a non-issue. (1735)

Comment: As far as locally, less than a year ago, right here in Matagorda County, two Rice [University] professors wanted to address his particular question, germane specifically to the county. Can the folks here in Matagorda County -- is there more cancer death rate right here than other counties in Texas? The answer is no. Two Rice professors, eminently qualified, studied this question and concluded that out of 230 counties studied, Matagorda County ranked 108 out of 230 counties as far as cancer death rates. And for sure 206 of those counties don't have a nuclear facility. (1735)

Comment: [W]e're upstream of the water -- of your water, and we're downwind of any kind of problems. And Wharton County does have a lot of cancer. Now is it because of you all? Probably not. But it has a lot of cancer. (1737)

Comment: Advanced boiling water reactors in Japan have an impressive record on low radiation worker exposures. It's lower than what we typically see in this country in any of our plants. They have an impressive record, and we look forward to being able to do this. There's design features in those plants that enable that to happen. (1740)

Comment: Later there is a comment that 1.9 fatal cancers would occur from the annual fuel cycle. Please add information about the day-to-day operations as well. (1722)

Comment: Also going on is what's known as LCRA-SAWS, or the San Antonio Water System. Now, that's not close. It's up near Interstate -- or U.S. Highway 59 between Wharton and El Campo. But they're going to build a large reservoir that's going to feed the city of San Antonio from the Colorado River. This is a large open body of potable water that is in a possible patch for any radioactive release from the site. It needs to be analyzed as part of the environmental report. (1749)

Comment: The National Academy of Sciences, National Cancer Institute put together multiple studies. The NEI has put this fact sheet together ... A whole bunch of long-term studies that have concluded unequivocally now that living near a nuclear facility will not increase your incidence for cancer. It just won't happen. (1735)

Comment: Two Rice [University] professors were asked to analyze the cancer death rate in Matagorda County. Statisticians, Ph.D., full professors -- one of them an adjunct professor at M.D. Anderson Hospital -- these folks know numbers, they know cancer -- one a Ph.D. environmental engineer. They concluded the same as the national and international studies. Living in the shadow of a nuclear facility will not increase the cancer death rate. (1735)

Response: *Health impacts associated with plant operation will be discussedin Section 5 of the EIS.*

Comment: [The Environmental Report] discussed the maximally exposed individual. Please, if you would, expand this section to include impact on all age groups. It should be women and children, young children, pregnant women, not just adult males. In some sections there was analysis of children, and that's good. But the impact should be done for all categories for all types of impacts. (1722)

Response: *The software packages that the NRC authorizes for use in calculating the maximally exposed individual (MEI) do calculate doses to various age groups, including teenagers and children. The concept of the maximally exposed individual is set to maximize the dose consequences from all pathways and all age groups.*

Comment: There was data that said water downstream is not used for drinking water or irrigation. Please analyze the impacts, however, because there is wildlife in the area and breeding grounds in the wetlands. We need to have added explanations of what the data means. There is some data provided in here, but no context given to what it means. (1722)

Response: *STP has an ongoing environmental monitoring program which does monitor for radionuclides in surface water, ground water and drinking water on an annual basis. Tritium is the only anthropogenic radionuclide that has been measured in onsite water sample for the past several years. Radiological releases to the environment are monitored in order to protect human health. Therefore, the NRC stands by its position that if man is protected, then so are the animals.*

Comment: Gaseous pathways are analyzed in terms of 50 miles, in terms of exposure to ground and air, and inhalation. Then there's a reference to radiation shielding, but no explanation. I would like the document to include exactly what is meant by radiation shielding -- how does it work, why does it work, what does it mean. (1722)

Response: *Shielding is any material or obstruction that absorbs radiation and is designed to protect personnel or materials from the effects of ionizing radiation.*

Comment: There's a conservation estimate of 2.5 milligrams per year at the site boundary. They come up with a total body exposure to the maximally exposed individual per year of .35 milligrams per unit. So if you double that you're talking about .70 milligrams per year. But we need to bear in mind this would now be four units and cumulative impacts need to be addressed throughout. (1722)

Response: *Cumulative impacts will be discussed in section 7 of the EIS. The National Council for Radiation Protection Report 93 (NCRP 1987) estimates that the average American citizen receives a natural background, (i.e. terrestrial and cosmic radiation in origin) radiological dose of 280 millirem per year, so 0.7 millirem is about 0.25% of that background dose rate.*

Comment: Several times the study just simply concludes that these exposure limits would be small -- in capital letters small. Please give us some context. What is the criteria for small? What do you mean? And why are they small? (1722)

Response: *The National Council for Radiation Protection in their 1987 Report number 93 estimated that the average American citizen receives a natural background, (i.e. terrestrial and cosmic radiation in origin) radiological dose rate of 280 millirem per year. The radiological doses reported in the Environmental Report are considerably less than natural background for the average American citizen and are therefore, considered small.*

Comment: The occupational radiation doses are listed as 197.8 person-rem for the two units per year. This is over 200 times, by my calculations, of what the average exposure would be. And if you double that, workers at the plant may be getting very high levels of radiation. Cumulative impacts must be analyzed. (1722)

Response: *The occupational population doses noted in the comment refer to the large work force (~5950 workers) that will be building the two new reactors. The average dose rate to that work force is about 33 mrem per person. Cumulative impacts will be addressed in section 7 of the EIS.*

Comment: More radiation means bigger risk of cancer. The EIS should include an analysis of the impact on humans and other living systems of an increase in radiation levels as a result of 4 operating reactors at STP. ... Will the two new reactors increase the amount of low-level radiation exposure to surrounding populations? (1710) (1721)

Response: *Radiological impacts from the normal operation of the two new reactors will be discussed in section 5 and cumulative impacts will be discussed in chapter 7 of the EIS.*

Comment: There is a need for a baseline of current animal, bird, fish, reptile, and other non-Human creature level of radioactive uptake, so that a later comparison can determine health effects of reactor operation. (1705)

Comment: [The Environmental Report] refers to the fact that gamma and beta emitters are typically part of the normally released radionucleids of power plants. Again, the impacts to biota are considered small. Please explain. (1722)

Comment: What is the effect of low-level radiation over prolonged periods on wildlife in the area? (1710) (1721)

Response: *The affected radiological environment will be addressed in section 2 of the DEIS. Radiological impacts to biota from operation of the reactors will be discussed in section 5.*

Historic and Cultural Resources

There were no comments for this category.

Hydrology-Groundwater

Comment: Subsidence, no. What happens if we over-use the ground water in this community, and will there be a decrease in the level of the plant? (1721)

Response: *The NRC is also concerned about subsidence and will be evaluating the potential for subsidence at the plant. Information on the NRC evaluation of subsidence will appear in Section 4.3 on water-use impacts during construction and Section 5.3 on water-use impacts during station operation.*

Comment: If global warming is occurring and as severe as we anticipate: Will groundwater decline? (1710) (1721)

Comment: ...in researching in-situ uranium mining, we have discovered that that activity also requires enormous amounts of groundwater during the mining process and that there is a high likelihood that the mining will contaminate portions of the Gulf Coast Aquifer. For example, the company which has applied for a permit to mine in Goliad County, about 100 miles west of here, will need 72,000 gallons of water a day during mining and additional vast amounts when restoration (which probably won't be possible) is attempted. (1717)

Response: *Changes in the availability of the water resource by competing demands and long-term variability will be addressed in the cumulative impacts Section 7.3 on water use and quality.*

Hydrology-Surface Water

Comment: Exelon Nuclear decided to move its proposed nuclear plant from Matagorda County to Victoria County based on concerns about the costs of preparing for a 20 to 30 foot storm surge. How would those same concerns apply to the STNP Units 3 and 4? (1705)

Comment: If global warming increases sea level rise by 7 meters - will STNP be within the storm surge zone? (1710) (1721)

Response: *As part of the NRC's site safety review, the staff will consider whether the site is suitable based on storm surge issues. The results of this review will be found in the site Safety Evaluation Report. This issue is not within the scope of the environmental review.*

Comment: There are also numerous studies underway regarding the needs of the bays and estuaries near STNP. Review of those studies regarding potential fresh water needs of the environment and potential effects on the availability of water to STNP should also be part of the EIS process. (1705)

Comment: [T]he LCRA [Lower Colorado River Authority] still has an ongoing assessment of the flow needs of Matagorda Bay. The Inflow Needs Study has yet to be finalized and integrated into any management decisions of the LCRA and has yet to be incorporated into any water rights requirements. An EIS must

assess the inflow needs of the Matagorda Bay and its potential impact on the South Texas Project. We would specifically suggest that an EIS examine the comments submitted by TPWD on the Matagorda Bay Inflow Criteria Report on January 22nd, 2008. (1706)

Comment: [A]ny EIS must address the proposed water rights permit being sought by LCRA for the so-called "excess" flows. This proposed water right is presently being contested by the Sierra Club in part because of our concern that existing and proposed water use - such as the South Texas Project - as well as the proposed permit would impact the flows into Matagorda Bay. The permit being sought by LCRA is intimately connected to the so-called LCRA -SAWS water project to provide the City of San Antonio with surface water through construction of an off-river reservoir not far from the proposed South Texas project. How construction of such a reservoir might impact water quality, water availability, water temperature and other parameters that could impact the South Texas plant must be considered. (1706)

Comment: [M]y wife has a place in Egypt, Texas, and that's probably why I'm here today. She couldn't come today. I'll talk a little bit on her behalf. She's a direct competitor for the water that's already allocated to the make up water I guess for that cooling lake. And so she's concerned on a -- just a on a practical matter. She's a rice farmer, cattle rancher and a low crop farmer in Egypt, Texas. (1737)

Comment: My issue here today is water. If we're going to be taking water from the Colorado River, and giving 3,935 gallons per minute to cool a new nuclear reactor, we're also going to be compromising our need for water to San Antonio where humans need water to drink, because San Antonio, with the SAWS project, which is San Antonio Water System, the LCRA is going to be draining water off the Colorado River to provide for San Antonio. (1739)

Comment: We have our rice farmers who absolutely need our water. We have out cattlemen who absolutely need our water. And let's not forget our aquaculture, or bays and our estuaries. Everybody's coming to Matagorda because they all love our fishing, but we're not going to have fish, we're not going to have oysters, we're not going to have shrimp, we're not going to have anything if we're not protecting our water. (1739)

Comment: There are a number of river studies going on right now, not the least of which by the Lower Colorado River Authority, who is in charge of this particular chunk of water. (1749)

Comment: This new plant will use 4,000 gallons of water per minute. The plant is also authorized to use both river and groundwater water. The plant is authorized to use up to 102 acre feet of river water per year, and use about half of that annually for STNP 1 & 2. If the plant uses its full allotment (of water), will there be adequate water for the new reservoir? (1710) (1721)

Comment: The LCRA-SAWS Water Project (LSWP) is based on a Definitive Agreement between SAWS and LCRA, signed in 2002, for the purchase of up to 150,000 acre ft/yr of surface water from the Lower Colorado River Basin at Bay City. If the plant takes its full 102 acre feet, will there be enough water for San Antonio to meet its water needs? (1710) (1721)

Comment: If it [the new plant] takes its full allotment of 3,935 gallons per minute will there be adequate water for rice farmers and others? (1710) (1721)

***Response**: The impact on current and future water use in the vicinity of the site from the additional water withdrawals from the Colorado River needed to operate STP Units 3 and 4 will be evaluated and presented in Chapter 5 of the EIS.*

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Comment: A similar situation would be the temperature of that water. We've had issues -- and I say we -- I mean the United States has had issues recently on nuclear plant where because the temperatures have gone up, the water temperature has gone up, which has made it difficult for those operators to be able to use the water and then discharge the water back in the rivers. And I'm speaking about some -- a nuclear plant in Tennessee. And some of the nuclear plants in Europe had a similar situation last summer. (1706)

Response: The comment refers to rising temperatures in the Main Cooling Reservoir and how this condition may relate to continued operation of the STP units and to blowdown from the reservoir to the Colorado River. The NRC staff's evaluation of the thermal properties of the blowdown discharge from the reservoir to the Colorado River when all four units are in operation will be presented in Chapter 5 of the EIS.

Comment: My understanding was when you reach certain amounts of -- when the water quality is of a certain type, in other words, if there's a lot of sediment in the water, you do have to discharge some back into the river. (1706)

Response: The comment refers to the blowdown from the Main Cooling Reservoir to the Colorado River at the STP site. The NRC staff's evaluation of the frequency of blowdown and its impact on the Colorado River when all four STP units are in operation will be presented in Chapter 5 of the EIS.

Comment: Our cooling reservoir's a closed cycle system. We do take make-up water out of the river to keep that reservoir filled. We take make-up water out of the river most of the times during high-flow conditions when it's, you know, a lot of water flowing through it, to keep it filled. The water actually cools in the reservoir, it goes around its little loop and cools to the air, it doesn't -- the hot water does not go back to the river. So it's closed cycle. We use it for make-up, and just to clarify the operating points, because I think that was confused earlier. (1740)

Response: *This comment provides some information regarding the closed-loop cooling system in use for STP Units 1 and 2. No response is needed.*

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Comment: Nuclear Power Plants use vast amounts of water. The Union of Concerned Scientists, in a document entitled "Got Water? Nuclear power plant cooling water needs," details in a 14-page illustrated summary problems power plants have when the "insatiable cooling water needs were not met." The threat of drought is real in Texas, as is the potential shortage of water. (1715)

Response: *The NRC staff's assessment of water use requirements for the operation of STP Units 3 and 4 including those during drought conditions will be presented in Chapter 5 of the EIS.*

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Comment: ...of the 12,200 acres containing the current South Texas Nuclear Project, 7,000 of these acres (over 57%) comprise the reservoir needed for the cooling water. ... how much of this water is lost to evaporation and how much more water might need to be diverted into the reservoir if STP expansion is approved. (1717)

Response: *The water withdrawal and consumptive use requirements for the operation of STP Units 3 and 4 will be provided in Chapter 5 of the EIS.*

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Comment: As sea levels rise, groundwater can be affected, both in terms of expansion into the surrounding soils and in water quality, e.g. salt water intrusion. The effects of such changes should be included in the EIS. (1705)

Comment: The combination of reduced precipitation, higher rates of evaporation and evapotransporation, and increased number of droughts suggest that relying on the worst historical drought may not be a conservative approach. (1705)

Comment: A conservative approach to evaluating the adequacy of the water supply available to STNP would incorporate the possibility that global warming would produce a drought worse than the worst historical drought at a time when available water is already reduced by reduced precipitation and increased evaporation and evaportransporation. That evaluation would consider: -- the time frame within which the global warming impacts would be expected and the projected operating life of the reactors, including renewal of licensing and -- the likelihood of a drought worse than the worst historical drought and the potential impact of such a drought on the operations of the reactors. (1705)

Comment: At the same time, there are credible studies that posit greenhouse warming as a precursor to rapid cooling. Schwartz and Randall, An Abrupt Climate Change Scenario and Its Implications for United States National Security, October 2003. Any evaluation of potential global warming impacts should examine the potential impacts of this alternative scenario for climate change, including the impacts on available water. (1705)

Comment: A true EIS must examine the relationship between the water needs of the proposed plants, its water use, water availability as well as how climate might impact those uses. (1706)

Comment: The impacts of global warming on the proposed plant must be assessed. Thus, when the first STP site was assessed, normal historic drought and water availability were a concern, and today, the flow of

the Colorado upstream of STP is a real concern during summer months, when flows are often lower and evaporation is higher. Nonetheless, the recent IPCC Assessments on the impacts of global warming, as well as independent assessments in Texas - such as the 1995 Gerald North study - suggest that global warming is likely to affect climate and water availability, including in Central Texas. (1706)

Comment: It would seem any EIS must assess the impacts of global warming and the likelihood that droughts in coming decades could be more severe than droughts in the 1940 and 1950s which are traditionally used as the "drought of record" to determine likely flows. Contingencies must be added for flows that are 20 percent or more less than historic drought levels. The EIS should rely in part on studies being conducted by the LCRA on the issue of the impact of climate change on flows as part of the assessment. (1706)

Comment: What about water use? With the droughts we've been having and with the increasing belief that global warming is a significant issue in this part of the country, will there be significant decreases in the amount of available water, and what will that mean to the operations of this plant? (1721)

Comment: One of the issues that's come up in terms of what scientists are telling us is that climate is changing. Yes, it always has changed, but it's changing more rapidly than in the past. And so, again, I would urge you, in the environmental analysis to look at how climate change might impact river flow, because I know that STP has an existing water right, and it appears on paper that you've got the water to operate your -- you know, the present plants and the plants in the future. (1706)

Comment: Is it really a good investment if in 30 years our flows are going to be that much less, will the water really be available and be there? Because if the plant is built and then doesn't operate, it doesn't make economic sense for anybody. (1706)

Comment: So I'm here to tell about global warming and how it affects it. With the growth of global warming you have to include how will this contribute the nuclear power plants, and how it will affect them. So the plant requires water to cool it down, and it requires cold water. So with global warming, there's going to be less water and it's going to be warmer, so you have to consider what the nuclear reactors will be in situations like that. (1729)

Comment: Are there going to be temperature limits? We're living in a world where climatological change is causing warming -- global warming. We know the sea level is rising. It's already bothering the Chinese. It's not bothering us yet, but it will. Now, what's causing it isn't a concern here. The mere fact that it's happening -- and it needs to be analyzed. We're talking about a grand total of about 60 years. We need to look at that. (1749)

Comment: If global warming is occurring and as severe as we anticipate: If the plant adds approximately 14.3°F to the water temperature, and the current intake temperature has been as high as 95.6°F, can the plant operate safely with a predicted 3-10' temperature increase due to global warming by 2100? (1710) (1721)

Comment: If global warming is occurring and as severe as we anticipate: Will there be enough water for cooling decline if a 25% decrease in river flows occurs? (1710) (1721)

Comment: If global warming is occurring and as severe as we anticipate: Will the cooling water be cool enough to allow the plant to operate? (1710) (1721)

Response: *The construction and operation of a nuclear plant involves the consumption of water. The staff will independently assess the impact of these consumptive water losses on the sustainability of both the local and regional water resources. This assessment will consider both current and future conditions, including changes in water demands to serve the needs of the future population and changes in water supply resulting from climate variability and climate change. While NRC does not regulate or manage water resources, it does have the responsibility under NEPA to assess and disclose the impacts of the proposed action on water resources. The staff's assessment of the impacts on the sustainability of water resources will be presented in Chapters 4 and 5 of the EIS for construction and operation, respectively.*

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Comment: There is substantial evidence to support the prediction that melting the South Antactic ice cap and the Greenland glacier will cause a rise in sea level ranging from 6 to 12 feet (This scenario is presented as a reasonable probability, not a worst case. The sea level rise would probably take place over an extended period of time and probably within the operating life of the proposed nuclear power plants).

Assuming that sea level were to rise to that extent, what would be the impact on: (1) the operations of the plant (2) the access to the plant from off-site, particularly by emergency response personnel and equipment (3) the ability to evacuate the plant in case of emergency (4) the ability to evacuate surrounding communities in case of emergency (1705)

Response:
Parts (2)-(4) of this comment relate to emergency planning and response and are not within the scope of NRC staff's environmental review. Part (1) of the comment can be interpreted to have both a safety and an environmental aspect. As part of the NRC's site safety review, the staff will consider whether the site is suitable based on characteristics of the site including long-term variability in flooding levels. The results of this review will be found in the site Safety Evaluation Report. This issue is not within the scope of the environmental review and will not be discussed in the EIS. As part of the NRC's environmental review, the staff will independently assess the impact of consumptive water losses during operation of the plant on the sustainability of water resources including consideration of current and future conditions resulting from climate variability and climate change. The staff's assessment of the impacts will be presented in Chapter 5 of the EIS.

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Land Use-Site and Vicinity

There were no comments for this category.

Land Use-Transmission Lines

Comment: Actually South Texas has three different power line corridors leaving the site. The advanced boiling water reactors will also have cross-ties into the Unit 1 and 2 switch yard. (1740)

Response: Environmental impacts associated with any planned new transmission lines will be addressed in the EIS, as well as, potential impacts associated with upgrades to the existing lines.

Meteorology and Air Quality

Comment: One of the new issues affecting decisions on nuclear power is the global concern over Human activity creating global climate change with unpredictable and potentially devastating results. While the nuclear industry successfully used this concern to drive their lobbying effort for a new generation of nuclear power plants, the premise that nuclear power is a positive response to global climate change concerns may not withstand objective examination. The EIS should include such an objective examination. (1705)

Comment: The context for evaluating emissions of gasses attributable to a nuclear power plant should include those gasses emitted during the following: Site preparation The extraction of materials to build the plant The transportation of the materials to the plant site The construction process The extraction of materials to produce the equipment to be installed The transportation of that equipment to the site The installation of that equipment The extraction of uranium The milling and enriching of uranium The transportation of enriched uranium to the site The operation of the plant, including the emission of heat and evaporated water. (Water vapor is a powerful green house gas. The EIS should provide a conversion of the amount of water vapor created by the nuclear plant operating process to the equivalent carbon dioxide emissions.) The decommissioning of the plant The transportation of radioactive waste, including high level, low level, and de (1705)

Comment: Water vapor is a powerful green house gas. The EIS should provide a conversion of the amount of water vapor created by the nuclear plant operating process to the equivalent carbon dioxide emissions. (1705)

Comment: Climate change can also be associated with increased air and water temperature which could impact the ability of the cooling system and intake to operate sufficiently. Thus, temperature change must be assessed more accurately. (1706)

Comment: While the ER takes credit for the emissions reduction that would be made by investing in a nuclear plant as opposed to a coal or natural gas plant (see discussion above), it does not discuss the global warming emissions resulting from the mining, processing, enrichment and fuel fabrication of uranium needed for the plant. (1706)

Comment: We feel there are cleaner, safer and quicker ways of achieving global warming goals. For example, nuclear power plants take a long time to build, and they're not going to really do anything in terms of the carbon footprint. (1736)

Comment: When you look at the carbon footprint for a nuclear power plant, you also have to consider the fact that mining and manufacturing -- mining of uranium and enrichment of uranium add carbon to the air, and the lower grade that uranium is, the harder it is to mine, the further you have to go to get it, all of those things add to the footprint. Also, transportation and storing of nuclear waste have to be added to that. This is not a zero carbon footprint industry. It's only a zero carbon footprint industry is you look just at plant operation. And I'm not even sure that's true. But if you look beyond plant operation to how they get the uranium, and what they do with the waste, it's to a zero carbon footprint industry. (1736)

Comment: We are not against renewables, solar, wind, conservation, efficiency. We teach our people to look carefully at decisions, ... I think that the studies that you look at on global warming, on greenhouse gases all tell you that you need all of that, including nuclear power, to be able to make any kind impact on reducing the emission of greenhouse gases and reversing the trends that we see in our global climate. (1741)

Comment: Also -- it is also a myth that nuclear energy will save us from global warming. We hear that a lot and it is not. It is not the truth, it is a myth. A nuclear power plant also creates global warming. (1729)

Comment: So you have uranium in South Texas, so you need to get it enriched, and there are only two coal power plants that do that, and they're not in Texas. So you have to transport the uranium to these coal power plants and you have to enrich it, and it causes -- it's one of the primary sources of a potent greenhouse gas that causes global warming. So -- and then you have to transport it back to the nuclear reactor, so that causes CO2 emissions, so you have all these accumulating effects just for that source of energy. (1729)

Comment: The enrichment takes place at coal-fired facilities that pollute the air and contribute to global warming. This is an environmental impact of the South Texas Project. (1731)

Comment: We seem to be given what we at the plant call a sucker's choice. Either you have renewables and efficiency or you have nuclear power. The studies that I have read that are done by eminent researchers say that in order to make any kind of significant contribution to the reduction of greenhouse gasses being released into the environment, you need it all. You need efficiency; you need renewables; and you need nuclear power if you want to make any kind of a significant contribution to reducing greenhouse gasses being released into the environment. (1741)

Comment: The two nuclear plants that are being proposed here would offset 15.8 million tons of carbon dioxide, 38.8 thousand tons of sulfur dioxide, and 10.7 thousand tons of nitrogen oxide. (1718)

Response: The impacts of nuclear power generation at the STP site on climate change and global warming will be addressed in the environmental impact statement in the chapter on the environmental impacts of the nuclear fuel cycle.

Need for Power

Comment: Chapter 8 - the need for power - analyzes Texas-based information about the need for additional power in ERCOT, which covers the majority of Texas. While Sierra Club does not object to the use of ERCOT reports cited on 8.4-6 or 8.4-7, we would note the list is incomplete because it does not list reports which discuss other scenarios for the growth in overall and peak summer demand. Because we believe that ERCOT's evaluation of power needs in Texas in itself is incomplete, we would suggest that the EIS conduct

a much more balanced full-scale independent analysis. Specifically, the ERCOT evaluations cited by the applicant do not take into account significant regulatory and statutory changes which will increase the use of load demand management and energy efficiency as a result of legislative action taken in 2007 [i.e. HB3693]. [I]t is quite likely that the future of peak and load demand will look quite differently then that presented by the applicant. (1706)

Response: The determination for the need for power within a given area is not under the NRC's regulatory purview. When another agency has the regulatory authority over an issue, NRC defers to that agency's decision. The NRC staff reviews the need for power analysis to determine if it is (1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty. If the need for power evaluation is found to be acceptable, no additional independent review by the NRC is needed.

Comment: In addition to these legislative and regulatory changes that will affect the need for power, several studies have come out over the last 18 months which should be assessed, as they present alternative demand scenarios based on the use of increased renewable energy, increased efficiency and increased demand response programs. (1706)

Comment: NRG and CPS base their need for the plant on forecasts from ERCOT that may overstate the need for power, and therefore the need for STP 3 and 4. Indeed, it should be remembered at the end of 2006, ERCOT was stating that generation capacity would fall below the required reserve capacity of 12.5 percent potentially by 2008, only to later reassess this projection based on a smaller demand as well as the opening of several gas plants. The ER states that by 2016 ERCOT projects there will be a need for between 20,000 and 50,000 MWe, and that the capacity of STP 3 and 4 - as well as many other generation sources - are therefore needed. (1706)

Comment: ER Chapter 9 states “NRG anticipates it would not be able to provide competitively priced power if it had to retain an extensive conservation and load modification incentive program” and further implies that demand management is not a form of baseload power. Nevertheless, this two paragraph analysis is not a true analysis of the potential for baseload demand management to provide power or make up for the need for additional power. The analysis of the ability of peak demand plants to replace baseload plants is superficial and does not incorporate the ability of different plants to be used in combination to provide power, such as the conjunctive use of solar, wind and natural gas as a way to provide power through peaking plants operating at different times of the day. (1706)

Comment: NRG has to prove there is a need for new energy. Their assessment of need is based on ERCOT projections of future energy demand in Texas. But, 1. The application ignores the effect energy efficiency and renewable energy will have in the future on demand. 2. Recent studies have shown that we could meet between 75-100% of Texas's growth in demand using efficiency and renewable energy ("Role of Energy Efficiency and Onsite Renewables in Meeting Energy and Environmental Needs in the Dallas/Fort Worth and Houston/Galveston Metro Areas". R. Neal Elliott and Maggie Eldridge. American Council for an Energy-Efficient Economy, September 2007 Report Number E078; (1710) (1721)

Comment: Federal and state-mandated energy efficiency and renewable energy goals do not appear to be factored into the energy needs assessment. The EPACT of 2007 mandated a ban on incandescent bulbs, increased air conditioning efficiency standards and standards of other appliances, and other efficiency reductions that are not counted in NRG's analysis of need. Nor are the provisions of HB 3693, passed by the Texas Legislature in 2007, factored into the energy needs assessment. The bill doubled the goal of the state of reducing by 10% per year the growth in demand for electricity to a minimum of 20%. A study completed during licensing period showed efficiency may result in as much as 50% of the growth in demand. (1710) (1721)

Comment: As to CPS's need for power the analysis contains an interesting logical flaw. It claims that an analysis of need is required for traditional utilities, such as CPS, but not for merchant companies such as NRG. It then further claims that since CPS has sold power at wholesale, and will continue to do so in the future, it does not have to do a needs analysis. This logic is imperfect. CPS is a municipal utility, and has not opted into competition, and is limited to incidental sales to customers beyond its traditional service area, so it should have completed a need for power analysis. CPS ignores the study done by KEMA in 20042 for CPS San Antonio that shows that over 1220 MW of baseload savings could be obtained at costs less than 2 cents per kilowatt hour (pg 3.1) or far less than the 6.5 cents per kilowatt than the cost of building and operating the plant. (1710) (1721)

Response: Affected states or regions may prepare a need for power evaluation and assessment of the

regional power system for planning or regulatory purposes. A need for power analysis may also be prepared by a regulated utility and submitted to a regulatory authority, such as a state public utility commission. However, the data may be supplemented by information from other sources. The determination for the need for power is not under NRC's regulatory purview. When another agency has the regulatory authority over an issue, NRC defers to that agency's decision. The NRC staff will review the need for power and determine if it is (1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty. If the need for power evaluation is found to be acceptable, no additional independent review by the NRC is needed. The information provided in this comment will be considered to determine whether it significantly affects the forecast on which the applicant relied for its need for power analysis.

Comment: Sierra Club believes that an EIS must more independently assess these claims [need for power], and also assess other projects currently being planned in Texas, including new wind generation, plans for solar plants, energy efficiency and demand response program, coal plants and new natural gas plants. (1706)

Comment: Our assessment, and along with the Energy Reliability Council of Texas basically says we need power, we need generation, we need new generation on line and we need to retire old units that are in operation, we need new power generation in Texas, we need new base load generation in Texas. (1740)

Comment: But the fundamental question is, do we need this plant, and will it be completed on time? And this history of this has not been clear. The last time we tried to build a plant in this community, it took eight years longer than necessary. And what we're seeing here in this particular analysis that has been presented to you all, is that the applicant says we need the plant for baseload. And it's impossible to really utilize other resources like energy efficiency and renewable energy as base load. (1721)

Comment: I wanted to make sure that the NRC is aware that legislation was passed last legislative session... that expands the amount of energy that investor-owned utilities, like NRG, are required to get from energy efficiency programs that all of us, frankly, pay for. And so I wanted to make sure that when you do the analysis of whether this power is needed, that we look at those new requirements on energy efficiency, because I think everyone agrees we can save money for our consumers, and generate more power simply by saving energy. (1706)

Comment: The Harris and Galveston County Council of Governments, which is 13 counties, including Matagorda County, recently started last year making plans for an additional 2.5 million people coming to our area by year 2015. That's a footprint of Los Angeles, California, coming on a 13-county area. Matagorda County is going to get its share of those people. We're having to plan for it now. But the main thing is the power that's needed for our state in this area is something we've got to work on. (1720)

Comment: I want to congratulate CPS Energy for their forward-looking windtricity and conservation programs. We've heard this afternoon people talk that we need a mix of conservation, energy saving, renewal resources, and CPS Energy is providing that to us in the San Antonio area. ...But even with this, even with the rest of the citizens doing this in San Antonio, I don't think this is surely enough to meet the future needs of electricity in San Antonio and south Texas. (1714)

Comment: Secondly, the governments of San Antonio and Bexar County are on record that they desire -- strongly desire continued economic growth in the city -- in Bexar County and in the city. CPS Energy has determined that timely additional electrical generation capacity is required for this growth in south Texas. So I submit that the proposed action and alternatives must be able to meet these requirements. (1714)

Comment: It has not been shown that there is a need for this expansion. (1709)

Comment: The governments of San Antonio and Bexar County are on record that they desire continued economic growth for the City and the County. CPS Energy has determined that timely additional electricity generation capacity Is required for economic growth in South Texas. The proposed action and alternatives must be able to meet these requirements. (1714)

Response: Affected states or regions may prepare a Need for Power evaluation and assessment of the regional power system for planning or regulatory purposes. A Need for Power analysis may also be prepared by a regulated utility and submitted to a regulatory authority, such as a State Public Utility Commission. However, the data may be supplemented by information from other sourcesThe determination for the need for power is not under NRC's regulatory purview. When another agency has the regulatory

authority over an issue, NRC defers to that agency's decision. The NRC staff will review the Need for Power and determine if it is (1) systematic, (2) comprehensive, (3) subject to confirmation, and (4) responsive to forecasting uncertainty. If the Need for Power evaluation is found to be acceptable, no additional independent review by the NRC is needed.

Opposition-Licensing Action

Comment: ... you are failing to carry out your charter of protecting the safety and health of US citizens. (1704)

Comment: So I think it's a bad idea. We're talking about the design of this plant going back maybe to `85, `98, somewhere in there, and the plants that in Japan maybe the only examples of these operating. (1737)

Comment: So I think that it's important for all of us to consider the environmental impact of building and constructing new nuclear power plants. As I said, I live very peacefully with our existing -- my existing neighbor. I think it's time for our direction to change, and to make kind of like a 180 because we have to develop alternative sources of energy. (1739)

Comment: And my case that I bring is because of the contamination that we have with our military, there was Kelly Air Force Base that left a few years ago, the year 2001, and left a lot of chemicals, plumes of chemicals under our homes. ... And it's going to happen to you all if you don't stop and think what you're doing at this time. You may just because you have a reactor, sure, but wait 20 years from now and it'll be too late to reverse this life of yours. And this is all I have to say, but look before you sign the dotted line. (1725)

Comment: I'm a 19 year old college student in San Antonio, Texas. And we've traveled more than three hours here to Bay City to oppose the nuclear power plants that are proposed. (1729)

Comment: I am writing to oppose any addition to the South Texas Nuclear plant in Bay City, Texas. (1709)

Comment: I am writing to oppose the addition of Units 3 and 4 to the South Texas Nuclear plant in Bay City, Texas. (1712)

Comment: The Coastal Bend Sierra Club joins the state-level Lone Star Sierra Club in opposing the expansion of STP. (1715)

Comment: Given that some health and safety risks are so high, and given that viable renewable energy alternatives such as geothermal, wind, and solar can be rapidly developed to safely meet our enerlY needs, my husband and I strongly object to one additional drop ofour precious Texas water being used to expand the South Texas Nuclear Project. (1717)

Response: These comments oppose the COL for STP Units 3 and 4, are general in nature and do not provide new information. These comments are not within the scope of 10 CFR Part 51 for the environmental review associated with the COL for STP Units 3 and 4 and therefore, will not be evaluated further in the EIS.

Opposition-Licensing Process

Comment: We [The Lone Star Chapter of the Sierra Club] believe there are significant deficiencies with the Environmental Report as well as with the application itself, some of which have already been noted by the NRC in letters dated to the applicant November 29, 2007 and January 30, 2008, and indeed form the basis for suspending the hearing process until further information is received. (1706)

Response: This comment expresses general opposition to the NRC licensing process for the STP units 3 and 4 COL, and provides no specific information for the NRC's associated environmental review. This comment also falls outside the scope of 10 CFR 51 which describes in broad outline the NRC's environmental review process for a COL. Therefore, this comment will not be considered further in regards to the NRC EIS for the STP units 3 and 4 COL.

Comment: I'd like to mention that officially I would like to request a public meeting regarding the safety review because that is not happening at present, and the safety review is not finalized. (1722)

Response: The safety review for the STP units 3 and 4 COL is separate from and outside the scope of the

environmental review, which is the subject of this scoping period. This comment provides no information relevant to the NRC's environmental review and will not be considered further for the associated EIS.

Opposition-Nuclear Power

Comment: The intergenerational crime noted in the previous section makes the analysis of alternatives particularly important. The question becomes: If there are alternative means of meeting the power needs that the nuclear plants are intended to meet and given that nuclear power produces high level radioactive waste, is there any excuse for not pursuing other alternatives and leaving nuclear power as a last resort? (1705)

Comment: There's a reason why there haven't been any new nuclear licenses approved for 29 years. What changed is not the nuclear plants, not their reliability, not their safety record. What's changed, this is 2005 Energy Policy Act, threw a whole boat load of money buying the nukes. (1736)

Comment: I'm the Director of the Sustainable Energy and Economic Development, or SEED Coalition. We work statewide around Texas for clean air and clean energy. We do not believe that nuclear reactors are the right path to take at this point in time. (1722)

Comment: [W]e think ultimately that the future is not more nuclear plants, it's concentrated solar plants, efficiency, more wind. (1706)

Comment: [W]ithin every step of this process it's producing waste. So when somebody tells you that nuclear power is clean, don't believe them, because if you go ask the people in South Texas that are being mined for uranium, they would definitely tell you that uranium and nuclear power is not clean. (1726)

Comment: We are greatly concerned about the permits to invest in more nuclear plant in South Texas. While nuclear plant is being touted as a alternative to coal-fired power plants, nuclear power plant continue to have serious problems regarding risk associated with waste and uranium mining. (1730)

Comment: The concerns over the safety of nuclear waste that were realized with Chernobyl and Three Mile Island are still reasons for caution today. Ultimately, the resources and ingenuity we have today lead us to believe that nuclear power is not the energy solution as it fails to meet a sustainable future to meet our energy needs and the growth of our energy demand. (1730)

Comment: I was opposed to this plant when it was initially built starting in 1976 and opening in 1988. Nuclear power is not safer now than it was then. (1712)

Comment: Texas does not need more dangerous nuclaer plants which all US taxpayers are forced to pay for whether we benefit from the power or not. (1712)

Comment: According to one recent article, "Over 300 national, state, and local organizations have endorsed a statement clearly outlining their reasons for continuing to oppose nuclear power,as a solution to climate change, while not a single environmental group is advocating for more nuclear plants. Nuclear power is too slow, expensive, and inflexible a technology to address climate change, and would entail the building ofthousands of new nuclear reactors. These reactors would result in intensified proliferation, waste,,and safety problems. These reactors would also drain investment away from renewable technologies.- (Public Citizen, "Fatal Flaws of Nuclear Power" April 2006). (1715)

Comment: Nuclear power plants do not produce renewable energy. The supply of uranium available in the United States, according to some estimates, will be exhausted within thirty years. At the same time, mining ofthe existing product poses a real threat of contamination of aquifers with radionuclides and heavy metals which have previously been dormant for millions of years. (1715)

Response: These comments provide only general information in opposition to nuclear power. They do not provide any specific information related to the environmental effects of the proposed action and will not be evaluated in the EIS. However, it should be noted that NRC EISs for COLs analyze the need for power and compare other energy sources as alternatives to nuclear power.

Comment: The nuclear industry maintains only $7 billion of insurance because of an exemption granted under the Price-Anderson Act. Sandia National Laboratory, working for the NRC, estimated that a meltdown would cost $56-314 billion, not including the cost of losing the plant itself. (1712)

Response: These comments provide only general information in opposition to nuclear power. They do not provide any specific information relating to the environmental effects of the proposed action and will not be evaluated in the EIS.

Opposition-Plant

Comment: I'd like to talk about acronyms for a minute because, as opposed to a NIMBY or PIMBY, I'm an NIMEG. I don't -- I want Not In My Electricity Grid. As a partial owner of the plant -- as a 16 percent owner as part of my being a citizen of Austin, I still resent the fact that as recently as a couple of years ago that 16 percent share was 62 percent of my electricity bill. 62 cents of every dollar I paid for electricity was going to retire the debt service for this plant. (1736)

Response: This comment express opposition to the existing plant and the proposed units at the site. The comment does not provide new information related to the environmental review for the proposed units and will not be evaluated further.

Outside Scope-Emergency Preparedness

Comment: There is a substantial evidence to support the prediction that climate destabilization will produce larger and more frequent hurricanes. Assuming that prediction to be true, what would the impact be on: (1) the operations of the plant (2) the access to the plant from off-site, particularly by emergency response personnel and equipment (3) the ability to evacuate the plant in case of emergency (4) the ability to evacuate the plant in case of emergency (1705)

Comment: Assuming that the nuclear plant would be taken off line during a potentially large hurricane, what would be the environmental impact of producing replacement power? (1705)

Comment: There is no threat assessment for Category 4 or 5 hurricanes. (1710) (1721)

Comment: What would happen if a hurricane were to hit? Could the reservoir walls crumble and cause a flooding of the reactor? Could evacuation roads be flooded? (1710) (1721)

Comment: Hurricane Claudette made landfall along the middle Texas coast near Port O'Connor on Tuesday, July 15, 2003. Coastal roads and roads along the west side of Galveston Bay were underwater due to tidal flooding between 5 and 8 ft. above mean low water (NOAA). Claudette was just a category 1 hurricane. What would happen to Route 61 or Route 35, which are emergency evacuation routes, if an evacuation was ordered in the aftermath of a hurricane? Could emergency personal enter the grounds? (1710) (1721)

Response: The issues discussed in these comments are associated with emergency planning and are outside the scope of the environmental review. Procedures that would be followed in the event of a hurricane or other natural disaster can be found in the applicant's emergency plan for the STP facility.

Comment: STP and the emergency planning of the county has been good for the county. We are well-prepared, well-equipped to respond to nuclear incidents, but we're equally as well-prepared and well-equipped to respond to hurricanes, tornadoes, floods, and industrial fires. (1728)

Comment: We're well prepared, we're well equipped for nuclear incidents, and we are also just as well prepared and well equipped to respond to hurricanes, tornadoes, floods, and industrial fires. (1728)

Comment: Another project that we're doing is an inter-operable radio communication system. At the sheriff's office with cooperation with the police department -- something that we're doing together -- we started an inter-operable radio communication that will link us with 13 counties around the Houston/Galveston area. When we get that system up and running we're going to bring STP under that radio program so that when my officers are there there's constant communication at all times, inside and outside and the power blocks. (1719)

Comment: As an elected official involved with the Matagorda County Enforcement Emergency Operations Center these very intensive drills has proven to me and you the excellent preparedness of the people involved in operating the plan under any adverse conditions. This training is also important in preparing ourselves for any type of disaster in our county. Matagorda County's EOC is second to none, I believe, of any emergency operating center. (1720)

Comment: I have found that anywhere I go, Matagorda County is recognized as the model for Emergency Planning and Response. This recognition did not come about by happenstance, but by a commitment to excellence by both STNP and Matagorda County personnel not settling for anything else but the best for our citizens and their workforce. STP's Emergency Planning staff work on a daily basis with the county's Emergency Management team to critique and improve our emergency plan, and are always searching for new and innovative ways to improve it. (1716)

Response: These comments present information regarding the emergency preparedness capabilities of the STP facility. Emergency preparedness is outside the scope of the environmental review, therefore the comments will not be evaluated further.

Comment: There is something that is -- I think it's in direct contradiction with what the plant physician said -- the Nuclear Regulatory Commission is required by an act of Congress, the public law 107.188, the Public Health Security in Bioterrorism Preparedness and Response Act of 2002, to stockpile and provide potassium iodide to keep you from getting thyroid cancer in the event of a nuclear leak. It's there, the government acknowledges it. They don't want you to think about this. Has anybody been offered potassium iodide? It's supposed to be available in a 10 or 20 mile radius around the plant. Anybody had anybody from the government come up to them and say, Here's your potassium iodide? It's required by law, the law is there because the plants are dangerous. (1736)

Comment: STPNOC needs to prepare the community for action in the event of an accident or disaster. Yet readiness will always be an issue. 1. If there is an accident, will the community be able to evacuate? 2. Rita demonstrated how quickly and completely the area can become congested. 3. If there is an accident, who will distribute potassium iodide (KI)? According to NRC rules, residents near nuclear plants must receive potassium iodide tablets in case of emergency. (1710) (1721)

Response: These comments relate to emergency planning and preparedness and are outside the scope of the environmental review. Information regarding the provision for potassium iodide can be found in the emergency plan for the STP facility.

Outside Scope-Miscellaneous

Comment: [T]he decision of investors and the federal government through loan guarantees and tax subsidies to spend money on nuclear power must be assessed against the potential to spend that same amount of money on other energy resources - such as wind, solar and energy efficiency - which might have more benefits and less cumulative impacts. (1706)

Response: The NRC does not promote the use of nuclear power as a preferred energy alternative and it does not regulate alternatives to producing electricity that do not involve nuclear power. The NRC does, however, evaluate energy alternatives as part of its NEPA review of applications for new nuclear power. Evaluating the financial decision-making of investors and the federal government is beyond the scope of this environmental analysis and the comment will not be further addressed in the EIS.

Comment: [E]mailed comments sent to STP_COL@nrc.gov were returned as undeliverable due to an undisclosed size limit. The NRC should not prevent stakeholders from filing comments due to size restrictions. It is unfair to limit the manner of filing, particularly when the most convenient way of filing is restricted. If the NRC truly cares about an open and accountable licensing process, it should allow comments of any size to be filed in each way available. (1708)

Response: The NRC regrets any difficulties the public may have had when attempting to submit email comments for STP units 3 and 4 scoping. Whenever the public encounters an issue such as this, they should immediately contact the NRC to rectify the problem. If it is nearing the end of the 60-day scoping period, the NRC can make an exception for accepting comments late if they have been notified ahead of time that the commenter experienced problems with an email submittal .

Comment: And I am dismayed to find that there is no one here from the Department of Homeland Security, or from FEMA, because these agencies, after 9/11 have vowed to work closely together to prevent catastrophes. And I think it's a huge lack that they are not here today working with the NRC. I am wondering when you will have a public meeting that does have those representatives present, and asking for you to do that.
(1722)

Response: The agencies mentioned in the comment are responsible for safety and security issues which are outside the scope of the environmental review process. As part of its site safety review the NRC staff will determine, after consultation with the Department of Homeland Security and Federal Emergency Management Agency (DHS/FEMA), whether there are any significant impediments to the development of emergency plans and whether the major features of emergency plans submitted by the applicant are acceptable (see 10 CFR 52.18). The currently operating units have an emergency plan in place that has been reviewed and approved by both the NRC and FEMA.

Comment: [I]f you look at the process on how this has been developing in our city, there hasn't been a space for folks from San Antonio to participate, which is why it was important to be here and share our concerns from the City of San Antonio about what has and has not been happening. City Public Service has had two what they call public open houses in the outskirts of the city with no advertisement, with no mobilizing and trying to get people to those places. And so I'm making that as a point on how we have been left in the dark in this whole process of the development of the nuclear reactors in the City of San Antonio. (1726)

Response: The NRC has no jurisdiction over the public process of other government or private entities. As part of the environemental review for the STP units 3 and 4 COL application, the NRC will hold public meetings, such as the one held for scoping, and will hold a public meeting after publication of the DEIS. The NRC will also hold separate public meetings as part of the safety review for the application. The public is encouraged to participate in the process for both the NRC environmental and safety reviews.

Comment: The President and the Congress have determined that national energy security is a critical federal policy. I believe the proposed action and its alternatives should implement this federal policy in the timeliest manner. (1714)

Comment: The President and the Congress have determined that national energy security is a critical Federal policy. The proposed action and alternatives should implement this Federal policy. in the timeliest manner. (1714)

Response: This comment provides no new information relevant to the environmental review of the COL application and therefore will not be evaluated further.

Outside Scope-NRC Oversight

Comment: To the extent the mitigation measures in the EIS include regulatory oversight and enforcement, the EIS should consider the current situation facing the Nuclear Regulatory Commission. The challenges include the following: (1) 104 aging reactors in operation, many near the end of the life cycle. These reactors are more prone to component failure, accidents, and breakdowns. Heightened oversight by the NRC is, therefore, required. (2) Loss of senior experienced personnel. Hundreds of NRC staff members with decades of experience and carrying a large part of the institutional memory of the agency will be retiring over the next ten years. (3) Hiring hundreds of new personnel. To replace the retiring personnel and respond to the increased workload for the NRC resulting from current conditions and planned expansion of nuclear power, hundreds of new personnel will have to be hired. The hiring process itself is a significant burden on existing staff. (4) Training of new personnel. The hundreds of new people coming into the agency will have to be trained by existing personnel. The training process will also be a significant burden for existing staff. (5) With hundreds retiring, the new personnel will have to be trained to take on significant responsibilities very quickly. (6) Newly trained personnel will take on significant responsibilities after only a short tenure in the agency. (7) Applications for new licenses are flooding in. The passage of loan guarantees set off a “gold rush” of license applications. Each application involves the review of thousands of pages, significant interaction with the license applicant, and evaluation of existing stardards applicable to the application. (8) Documents that formed the basis for past licensing decisions have not been updated in years because there were no new applications. The standard review plan and the preliminary safety analysis report are central documents that are seriously outdated and have to be revised. These revisions should be carried out with

the involvement of senior staff before they leave the agency. (9) Interventions and hearings may also become part of the licensing process. The rules provide for people whose interests are affected by the proposed nuclear plant to seek status as intervenors in the licensing hearings and present contention identifying the issues they wish to pursue. To the extent intervention petitions are successful and contentions are accepted, staff will be tasked with responding to the contentions and participating in the hearings. (10) New license applications are coming from companies with little or no nuclear experience. The design, engineering, and construction companies will generally not have been involved in nuclear plant construction for at least 20 years. The lack of experienced companies requires an even greater level of NRC scrutiny during the construction phase. (11) Advanced boiling water reactors are an evolutionary change from previous boiling water reactors and exist primarily in Japan. Foreign companies will be needed to advise and guide the United States companies in the construction and operation of these reactors. Some of those companies come from a very different culture as relates to being transparent about safety matters, accidents, and errors. NRC will need to oversee the work of these companies with an emphasis on ensuring that there are no cultural barriers to adequate oversight and performance. (12) There may be licensing proceedings opened up for the Yucca Mountain high level waste storage facility. The proceeding (1705)

Comment: To respond to all these convergent challenges, the NRC will have to perform at super Human levels of competence and perfection. There is no historical support for concluding that the NRC, or any other Human group, is capable of performing at that level. To the contrary, all the factors identified above predict a high likelihood of failure in one aspect of the regulatory scheme or another, and probably multiple failures ranging from the minor to the catastrophic. Placing the burden of new license applications on an agency already stretched to its limits will contribute to the likelihood of those failures. The agency responsible for ensuring the safe construction of new nuclear plants is not equipped to perform that responsibility in a manner ensuring the health and safety of the public. The EIS should evaluate how the overwhelming challenges facing the NRC make reliance on regulatory oversight and enforcement for mitigation of environmental impacts at least problematic. (1705)

Comment: And so with the information presented to you here today, you can accomplish two things. You can not only provide a vent for the community to feel as if they've had some say about their community and environment before they're steam rolled over by big business, you can show the citizenry that you are an agency with integrity and the desire and ability to do what's right by thoroughly and fairly considering all the information presented to you. (1733)

Comment: And I want to praise the NRC for their educated people. And, Bob, they've got a fantastic track record. (1720)

Comment: The NRC has proven records since conception. People come and go, but the documented evidence and experience of your agency is invaluable. The future will be more demanding, and you will avail. With guidance and direction of the country will meet the future of our energy needs. I believe you will weigh this all fairly and make the right decisions. (1720)

Response: These comments fall outside the NRC's process for conducting an environmental review for a COL as set forth in 10 CFR 51 and 52. The comments did not provide new information relevant to this EIS and will not be evaluated further.

Outside Scope-Safety

Comment: The potential exists for more frequent and more powerful tornadoes. That potential should be examined in the EIS. (1705)

Comment: The Exelon Corporation initially lands near the South Texas site for its proposed new nuclear power plant. These lands were at a lower elevation and closer to Matagorda Bay. After learning from the NRC that the plant would have to prepare for a 20 to 30 foot storm surge, Exelon decided that building a sufficient structure would be too expensive. “Exelon Nuclear not coming to Matagorda County,” Matagorda Advocate, December 20, 2007. The decision made by Exelon raises questions about the STNP site for Units 3 and 4. The EIS should address the safety implications for the site of such storm surge in light of potential global warming impacts (see next section). (1705)

Comment: In examining potential hurricane effects, rising sea level combined with storm surge should be examined. An additional factor in this analysis should be land subsidence. (1705)

Comment: In addition to the likely increase of drought due to climate change, climate change has already been associated with an increase in sea rise and the formation of hurricanes. Thus, how sea rise level would impact the operation of the plant, and how increased sea surge and hurricane activity might impact the proposed plant should be assessed. The ER simply assesses the number of hurricanes in the area, but fails to address their impact on the proposed plant. (1706)

Comment: And, will the temperatures of the operating water in the plant get to a level that the plant has to be shut down, like it has been in France, Germany, and some places in the Southeast? (1721)

Comment: What about hurricanes? If sea level rises occur at the rate that are projected by many of the people who are looking at global warming, will this plant be vulnerable to hurricanes? And in this particular community, will you be able to get out in time? (1721)

Comment: [I]f we're likely to have more droughts, more hurricanes, how is that going to impact the operation of this plant. (1706)

Comment: [I]f hurricanes are to increase, if the sea is to rise, if there's the potential for storm surges, if there's the potential that more saline water goes further upstream, particularly in low flow conditions. (1706)

Comment: Also with the sea level rising and the storms in the area, how would that impact the nuclear reactors, and you see what happened with Katrina. And the people who were most affected were the low income people who had no Medicare or nothing, and they lost everything, and they were the ones most affected by this environmental justice. (1729)

Comment: In light of recent hurricane activity in the Gulf and the prediction for more, the Gulf Coast does not seem to be the best location for any hazardous activity. (1709)

Response: These comments generally express concern about the impacts of global warming and climate change on the proposed nuclear power plants. The DEIS is concerned with the potential effects of plant construction and operation on the environment. Therefore, these comments are not within the scope of the environmental review. The staff's safety evaluation report will address the effects of weather on the plant. Nuclear power plants are extremely robust structures that are designed to survive severe weather such as hurricanes and tornadoes. Should an extreme weather event cause the nuclear power plant to be shut down (i.e., the reactor is shut down as a hurricane is approaching, rather than the reactor being shutdown by the hurricane), the reactor can be maintained in a safe condition. The likelihood of the maximum wind speed in a hurricane or tornado exceeding the design wind speed for the reactor and its safety related systems is typically less than 1 in 10 million in any given year. There is no evidence that the frequency of the most violent tornadoes is increasing. These comments are outside of the scope of the environmental analysis and will not be addressed in the DEIS.

Comment: Whether the NRC-certified GE ABWR design is the same as what STPNOC and its owners (hereinafter called "STP") wish to build, given the large numbers of changes, variations, and exemptions (some of which are substantial and significant) from the certified STPNOC has requested. I am also concerned that the designer of record is now Toshiba, and not GE/Hitachi. (1707)

Comment: Although no ABWR has ever been built in the U.S., two of the four extant ABWR reactors, designed to be earthquake-proof in Japan were damaged in the July 26, 2007 earthquake. [The damage that resulted from the earthquake] hardly lend confidence to the ABWR design proposed by STP. (1707)

Comment: And when they did the environmental impact statement over there, they said that there's no -- you know, there are lots of earthquakes in Japan, but they picked an area that they said is pretty earthquake-proof. I'd say this area is probably pretty earthquake-proof. Well, they were wrong. An earthquake, a 6.8 magnitude earthquake hit last year. All of the reactors at that location are shut down. Both of the ABWR reactors were damaged, two of them, I think, and I'm getting this from -- the operator is Tokyo Power, and you can go to their website, and they specify what the problems are. The control rods that -- the primary safety feature in a reactor is the control rods that moderate the reaction, lifting them up and out, in both of these ABWR reactors there were control rods that were stuck. If I'm wrong about that, I'd like somebody here to correct me. There were at least two rods that were stuck, and maybe many more. The liner, the metal liner was damaged and leaked radioactive water into the -- leaked it out of the core. I'm not quite sure where it went. That concerns me. (1734)

Comment: And what happened was in March of `54 -- I have it my purse but I think that's right -- there was an earthquake, and eight point something, in Alaska, and it came all the way down to Matagorda. And this was brought to the attention of the NRC at that time before that project we have now was built, and that there is a fault line that goes all the way through Matagorda. And one of you a while ago, I don't remember which one, mentioned seismic impact. And from what we were told, that there were extra reinforcements, the gentleman a while ago that was talking about the rods coming up and down, that there was extra attention given to the plant we have now because of that instability. (1738)

Comment: The plants in Japan -- now there were two of those units, advanced boiling water reactor units that are currently shut down because of the earthquake that was mentioned earlier. The plants are certified, it's actually to a .3 RG earthquake. That's a significant earthquake and basically it's very far beyond what's going to be -- or could ever be experienced at South Texas. But the really important thing about the Japanese experience that it told us, is those plants felt that earthquake, felt an earthquake actually bigger than that, no safety issues. Yes, they've got some stuck control rods -- by the way, they're stuck in, which is where they're supposed to be, they went in and then stuck as it should. They had some sloshing of water out of the spent fuel pool that got off into the sea and very, very small quantities of radioactive material got loose, well, within their regulatory limits. Safety-wise there was no issue from those plants. They survived it. (1740)

Comment: I'd also like to mention that these reactors have never been built before in the United States. NRG has never built a nuclear reactor. In Japan the reactor history has not been a good one. We've provided a sheet to you about some of the many incidents that have occurred there. Of course, one is hopefully one we won't have here, which included an earthquake, and now they've got stuck control rods they can't get out. (1722)

Comment: Seismicity -- actually the Texas Gulf Coast -- lowest seismic regions on the earth. We look at what the numbers are. We do a comprehensive analysis that's done to determine what's the potential for a seismic event in this area. And it's extremely low. (1740)

Comment: [T]he advanced boiling water reactor is a certified design. It's a certified design that's meant to be able to basically be put down anywhere in the country. So it's actual seismic design of the advanced boiling water reactors is many times more than will ever ben required in South Texas. And it will be built according to the certified designs, so it will meet those higher standards well beyond what we would required if it was just specifically licensed at South Texas. (1740)

Comment: I think we have some very definite problems with the seismic analysis. We are having adjacent gas storage -- both natural gas and liquified natural gas -- just over the county line to the west that is being built. Both of these things provide external hazards to the site and should be evaluated for both their direct and their seismic implications. (1749)

Comment: We also have a problem with injection wells. I live on the south end of town. Less than six blocks from my house is a very high level waste injection well. Now, we all know about 1987 or `88 the Perry plant in Ohio suffered a seismic event from an injection well that was approximately 30 miles to the southeast. We need to analyze for that. (1749)

Response: These comments generally express seismic concerns with regard to the proposed nuclear power units. The environmental impact statement is concerned with the potential effects of plant construction and operation on the environment. Therefore, these comments are not within the scope of the environmental review and they will not be addressed further. The staff's Safety Evaluation Report will address seismic issues in detail.

Comment: Some metals are increasingly in short supply. This shortage raises the potential for substandard metals or untested alloys to be supplied to the nuclear power plant. The EIS should examine the potential for environmental impacts from such materials being used. (1705)

Comment: Because nuclear plants are consistently having to reshuffle the fuel rod assemblies and spent fuel racks, the EIS must provide a structural analysis of the spent fuel racks, procedures for and training to makeup water to the spent fuel pool, a description of the dynamic and load drop impact analyses for the new fuel storage racks and spent fuel racks. While NRG has promised such an analysis as part of the FSAR, it has not yet been developed. (1706)

Comment: [C]onsiderably more information is needed as part of the EIS to address the structural changes anticipated at the radioactive waste building. The EIS should also address existing waste generated by STP 1 and 2 since presumably the LLRW and spent fuel rods would be managed jointly by all units. (1706)

Comment: I am concerned about the design of the new units (1733)

Comment: Now talking about another issue is the fact that NRC has approved over 100 nuclear reactors in this country that are now operating, but we don't have any so-called advanced boiling water reactors, ABWR, which are proposed. These are, you might say, since we don't have any, that they're somewhat experimental, they're coming in -- that's the possible reactors 3 and 4. And the ones that had been built were designed by Hitachi and General Electric, and they're mostly in other countries, they're mostly in Japan. And there are two -- two of the biggest nuclear reactors in Japan are these ABWR reactors. And they've had to have been operating for a number of years now, and they've had to be shut down several times for safety problems, and started back up again. (1734)

Comment: Another thing that concerns me is that this so-called GE design was -- that was certified by the NRC 10 years ago, and that's the one that they're using now. And yet South Texas nuclear operating has recently filed with the NRC more than 100 pages of detailed changes that they're making, exclusions, exemptions, modifications. I'm not sure that we're talking about a design now, that they're planning on building now that was really actually approved 10 years ago. (1734)

Comment: I read in the *Houston Chronicle* this morning that five days ago the regulators said that they have suspended the review of parts of the application, the final safety analysis report and the security plan, until the plant management resolves "vendor support issues".

Comment: My interest is to monitor the engineering and the construction of the plant, and I hope I will be afforded that opportunity. And I think that we should all be interested in the performance of the new plants as they come into fruition. (1746)

Comment: On a boiling water reactor there is always a chance of a gas explosion. The disassociation of water and hydrogen appearing in the air ejectors on the turbine gives you the ability to have a pretty sophisticated explosion on the gas unit. (1749)

Comment: Much shoddy workmanship was exposed in the original construction of the South Texas Nuclear Plant. (1709)

Response: These comments generally express concerns about the design and construction of the proposed nuclear power plants. The environmental impact statement is concerned with the potential effects of plant construction and operation on the environment. Therefore, these comments are not within the scope of the environmental review, and they will not be addressed further. The staff's Safety Evaluation Report will address reactor design and construction in detail.

Comment: And our first responsibility is the safe operation of those units. I think our record demonstrates that our commitment is to safety. And when I say our, I mean the management and the employees of South Texas Project, who also are your friends and neighbors who live in this community. (1741)

Comment: I worked at the nuclear power plant for over six years. I was the last three years the lead nuclear engineer for Bechtel Corporation, and I spent 25 years with that corporation, many of which were spent on various nuclear plants in and around this country and overseas. I venture to say that STP plant is probably, in my estimation, the best that I ever worked on and contributed to. I'm very proud of that plant, and the engineers and the technicians and the craftsmen that worked on that plant are a testament to the safety record and its recent world records that this plant has set. I don't think anyone can argue with that in terms of its safety record. It speaks for itself. (1753)

Comment: You know, we [STP] work hard to identify things in the plant that need to be replaced. We proactively replace them to ensure that those plants run reliably and safely for the long term. We're in it for the long term. We focus a lot of attention on equipment and equipment liability. This is one significant example that demonstrates our willingness to spend a significant amount of money to ensure South Texas runs reliably. (1740)

Comment: I think that our record demonstrates our [STP's] commitment to both safety and the environment. And when I say our commitment I'm talking about the management employees of South Texas Project. But they're also your neighbors, your friends, the people that you deal with day in and day out. (1741)

Comment: That is the safest facility I've ever been in my life. I've been around the world three times. I've seen a lot of different things in different places. It works. They have contingency plans for most of it. The rest of it you all can figure out. (1750)

Response: *These comments generally express support for the proposed nuclear power plants based on safety of existing power plants. The comments only provide general information and are not related to environmental impacts of the plant. Therefore, they are not within the scope of the environmental review and will not be addressed further.*

Comment: I'm really worried about the large amount of money involved in the push for more nuclear power plants. I'm afraid that there's a tremendous financial incentive to underreport accidents. And I don't use the NRC's term, which is incidents. I monitor the event reports on the NRC, and I think this is already happening. There's been a number of things in the last few weeks -- in the last few months that have been underreported, and I suspect it's because of the money involved if people knew how bad the situation was at the nation's nuclear power plants. (1736)

Comment: If you think nuclear power plant is safe, I want to challenge you to go daily to www.NRC.gov and read what's happening at the nation's power plants. It will frighten the pants off of you. (1736)

Response: *These comments express general concerns about the safety of the proposed nuclear power plants. They are not related to environmental impacts of plant construction or operation and therefore will not be addressed in the environmental impact statement.*

Outside Scope-Security and Terrorism

Comment: The on-site storage analysis should include the potential for a terrorist attack on the fuel storage area and develop mitigation measures that can withstand attacks, such as a deliberate airplane strike on the plant or an explosive projectile launched from the ground. (1705)

Comment: The alternatives analysis should also consider the vulnerability of a central generating station on the coast with long transmission lines to the major urban centers versus dispersed units, such as home solar units. Obviously, taking down a transmission tower is far easier than attacking a nuclear plant and still achieves interruption of power as a tactical objective, even if no radioactive release results. (1705)

Comment: Sierra Club has already submitted comments indicating our serious concerns with [the] approach of assuming that any design that is pre-certified and has undergone some initial analysis should not be required for a full analysis of the potential impacts of an airplane attack. We believe an EIS should examine this possibility, including an attack both on the reactor vessel but also on the radioactive waste building. Other terrorist attacks on the reactor or waste and security in general should be examined fully as part of the analysis. (1706)

Comment: STP management talks a lot about safety. They regularly run credit checks on employees to be sure they're financially stable, I guess to lessen the risk of a pay-off type situation should a terrorist try to contact an employee to gain access to the plant, secure parts of the plant. (1733)

Comment: And I insist on seeing in the environmental review the worst case, because this also has to include terrorism. There is a very real chance that one nut with a rocket launcher could change the fate of Texas, could change this area for thousands of years to come. (1736)

Comment: There's a lot more opportunity for danger in other types of process plants in our area besides STP, especially when it comes to terrorists. (1720)

Comment: [W]orkers will probably be coming from around the world. Security is going to be a very serious concern. (1722)

Comment: Do you have the security in place to make sure that it's never the subject of terrorist sabotage and airplane attack, whatever? (1706)

Comment: ...my understanding is that you folks certified the design for this, and my question is really, have we made sure that this design is capable of withstanding something like a terrorist attack. You know, I hope I would never have to think about this, but I'm originally from New York, and 9/11 affected me and the people I grew up with, and so we never thought we'd have these kind of attacks, but now we have to think about those things. So is it being designed to withstand that kind of attack would be the question. (1706)

Comment: My concern as sheriff in this whole project is obviously security. The goal of the security program at STP being protecting the health and safety of the public. My response to that is, yes, they can. They've been doing it for over 20 years. (1719)

Comment: [The Matagorda County Sheriff's Department] participates regularly in on- and offsite drills on tabletop exercises. I spoke with the SWAT team. The ammunition that my team carries and many of my employees on the street carry is the same ammunition that the security officers carry -- the same weapons that they carry. So if we ever do have to respond to an event to back up the nuclear plant -- to back up the security officers we're able to do that more easily. (1719)

Comment: [O]ne of the things that strikes me and surely is frightening if you want to talk about frightening things is, you know, this country has numerous facilities that are targets -- priority targets. I venture to say a nuclear plant is not high on that list. We have the ports -- the Port of Houston -- we have various refineries, chemical plants -- all kinds of facilities that have much more hazardous waste, if you will, and dangers that are certainly not nearly well guarded as a nuclear power facility. (1753)

Comment: Another very unique thing about our plant and the unique thing about the state of Texas, the state of Texas was so -- lost my word -- they were so I guess impressed -- or so confident -- confident is the word I'm looking for -- in the training that the Nuclear Regulatory Commission requires of an officer at a nuclear facility that the state of Texas with Senate Bill 1517 exempted them from falling under the Private Security Act. And instead of that they increased their authority giving them law enforcement authority in the areas of arrest, search, and seizure and the use of deadly force to protect that plant. That's how far the state stands behind security -- of nuclear security officers. (1719)

Comment: Aircraft impact analysis -- concerns about aircraft impact has not been analyzed. Yes, aircraft impact has been analyzed. The nuclear industry performed analysis of aircraft impact in the time shortly after 9/11 -- performed it for all the different designs of containment buildings in the nuclear plants in the United States, of which South Texas is one. Nuclear Regulatory Commission has also done similar analysis. Details of those analyses are, of course, safeguards information and can't be discussed in an open forum like this. We'll tell you that the results -- the South Texas containments -- the containment buildings in this country are very robust structures and advocate the ability of withstanding aircraft impacts. The advanced boiling water design has also been analyzed for aircraft impact. That's been done and will be looked at again as part of the new rule makings on aircraft impact. We are -- ensure that it has the appropriate -- again, it has a very strong containment. And it's -- spent fuel is also stored inside a building which has concrete walls. (1740)

Comment: Units 3 and 4 security review -- yes, there will be a comprehensive review of Unit 3 and 4 security as part of the design and licensing process to ensure that those measures that are appropriate from the -- that have been implemented in the plants are implemented also on 3 and 4 and takes advantage of the stage of design that we can go back and do things a little bit better than we've done in the operating units just because we have a clean sheet of paper, so to speak. (1740)

Comment: Having worked a couple of outages at the plant I have to tell you it is the most secure facility I have ever been in in my life. It is unbelievable what you have to do just to get inside. It is -- it takes days. You don't go out there and walk in. (1745)

Comment: This current process should afford us an ability to access South Texas 1 and 2 and 3 and 4 for aircraft impact hazards analysis. Right now the U.S. Nuclear Regulatory Commission is saying that an aircraft -- and it doesn't have to be a commercial aircraft, friends. It can be a twin-engine Cessna loaded with C-4 and shaped charge. We want that analysis to be done for South Texas 1 and 2, 3 and 4, and every

other reactor in this country. We believe that our -- we're owed it because national security in a post-9/11 world is a paramount subject. (1748)

Comment: And we should take off the blinders and realize that it is part of the democratic process to allow us to say -- you know, to present evidence -- to present documents. And I'll tell you, the documents are there. NRC has the documents -- the documents that say that South Texas 1 and 2 were not constructed nor designed nor evaluated for aircraft hazard. That just came back into the public document room as a result of the NRC's own rule making. And another document -- that -- by the way, that document was done by Aragon National Lab. And another document that just came into the public document room that was -- you know, relates to the NRC's own analysis of what should be going into making Units 3 and 4 more terrorist resistant -- that document has just come back into the U.S. public document room. (1748)

Comment: The security problem is acute in that having Deputy Dawg and Barney Fife out there looking to suppress some sort of armed force is old hat. This is the 21st century. We don't even have to get close. We know that. We know that all too well. With a simple mortar and GPS targeting, they were able to hit first time every time. Now, what's the target? The target is very simple: 20 years' worth of spent fuel. That's not in a hard building; that's in a tin building. It doesn't make any difference whether you get it really complete; all you have to do is hit it once and you've got a mess. And the mess will be enough to take care of the site for quite a while. (2123)

Comment: Design basis accident, loss of offsite power. If you look where the power lines run, they run parallel to Buckeye Road up some eight miles to State Highway 35 from the site. According to the COLA, they plan on duplicating some of those lines. In 1968 in Baraboo, Wisconsin, two dissident students from the University of Wisconsin took out a substation. It took them about five years to figure out even who did it, but it was done very easily. They did it with a wrench. They went out and took the tower apart and let the wind take the rest of it. This was nowhere near the 500 KV that's on that line leading out of that plant. If you want to cut a big extension cord, it don't take a world of hurt to do it. That needs to be analyzed. (1749)

Comment: But in either case one of the ways to defeat that plant is to make the cooling pond go away. The same things that I talked about with spent fuel pools and mortars. (1725)

Comment: And this lady that was just on before me talked about airplanes, and so did the gentleman. If you take that wall down, it's all over. You know that, I know that, we need to analyze for that. (1749)

Comment: As sheriff of Matagorda County one of my greatest concerns when it comes to the nuclear plant is security. And the key issue is can this security force protect the health and safety and the public. My stance on that is, yes, it can because it's been doing it for the past 20 years. ... One of the things I always think of when someone asks me about the security is a comment that an FBI agent made when I was accompanying this group on a tour at the nuclear plant. And that agent said something to the effect of, An adversary that would be a real threat to this facility would realize they could cause a greater effect at another critical infrastructure with less effort. (1719)

Comment: Get real on security. This is the 21st century. This is not World War II; we're not doing M-5. We're not doing, you know, storm the Bastille. We now know -- and September 11 brought it home very strong and very positively -- nobody has to confront anybody. ...Physical confrontation at the site is neither required nor desirable to achieve the objections of terror; you don't have to do it. (2123)

Comment: Where will the terrorist materials come from to perform these things? They're already here. Where's the delivery method? It's already here. We know that. We know that all too well. We know it doesn't take much. And when we had four of these guys in a row sitting up in the middle of the coastal plain within takeoff full-fuel distance of Houston, San Antonio, Corpus Christi, Austin, it doesn't take much more than a village idiot to figure out that this is an easy mark -- a real easy mark. Is that's not part of the environmental impact, it sure the devil ought to be. (1749)

Comment: I keep a deputy sheriff at the nuclear plant performing on a controlled area patrol 24 hours a day, seven days a week, 365 days a year. Depending on what the threat level in the nation is sometimes that might be as many as four deputies. But that's done continuously. (1719)

Comment: Nuclear power plants are not secure. The Union of Concerned Scientists published a report in 2006 on the security flaws of the South Texas Project near Bay City. They cite problems with unrestricted entrance into the plant and lax background checks for employees, among other concerns. (1715)

Response: *The NRC is devoting substantial time and attention to terrorism-related matters, including coordination with the Department of Homeland Security. As part of its mission to protect public health and safety and the common defense and security pursuant to the Atomic Energy Act, the NRC staff is conducting vulnerability assessments for the domestic utilization of radioactive material. In the time since the events of September 2001, the NRC has identified the need for license holders to implement compensatory measures and has issued several orders to license holders imposing enhanced security requirements. The NRC will continue to consider measures to prevent and mitigate the consequences of acts of terrorism in fulfilling its safety mission. However, the issue is outside the scope of the environmental impact analysis and will not be analyzed in the EIS.*

Process-ESP-COL

Comment: The entire process involved from start to finish of a nuclear project needs to be examined for direct, indirect, secondary, and cumulative impacts, e.g.: Site preparation The extraction of materials to build the plant The transportation of the materials to the plant site The construction process The extraction of materials to produce the equipment to be installed The transportation of that equipment to the site The installation of that equipment The extraction of uranium The milling and enriching of uranium The transportation of enriched uranium to the site The operation of the plant Potential impacts on endangered species (1705)

Response: *With respect to environmental impact analysis, the NRC's COL process is as follows: The NRC regulations governing a COL application require that an applicant for a COL must provide the NRC with an environmental report that meets the requirements of 10 CFR 51.45 and 51.50. As described in 10 CFR 52.17, the contents of an application must focus on the environmental effects of construction and operation of a reactor or reactors that might be built at the proposed site. Additionally, Section 52.18 requires that the NRC prepare an EIS for the application that focuses on the same issues. In its EIS, the NRC staff will review the impacts of the proposed construction and operation of new nuclear units based on the information provided in the application and on information obtained from independent sources. The NRC will document the bases for its conclusions in the EIS and in the COL permit, if approved. The majority of the impacts noted in the comment are evaluated as part of this COL environmental review process. Other issues noted fall outside of the regulatory purveyance of the environmental review.*

Comment: We believe that the decision by the NRC to reverse its decision to accept the application indicates there are serious problems with the process designed by the NRC, and would suggest that until an EIS is completed, the clock on filing for petition to intervene should not begin so that the applicant, NRC and potential petitioners can have the benefit of seeing what an EIS process finds out. (1706)

Comment: Since 1992 there has been a consistent effort to constrain citizen input, not to expand it. Right now we've seen -- and this is all too familiar in Texas -- what we're seeing is fast tracking of these permits, and it's unacceptable. We've gone from what should be four and a half years down to three. We've gone from shortened input -- and to be honest, this is -- if this permit moves forward, it is actually illegal. (1722)

Comment: We have a licensing process moving forward with an EIS not even begun. These are both violations of the statutes and regulations that apply to this process, and I would urge you to halt all further proceedings on the license application until the environmental impact statement is finalized as is required by federal law. (1722)

Response: *These comments express general opposition to the NRC licensing process for the STP units 3 and 4 COL, and provide no specific information to the NRC's associated environmental review. These comments also fall outside the scope of 10 CFR 51 and 52 which describe in broad outline the NRC's environmental review process for a COL. Therefore, these comments will not be considered further in regards to the NRC EIS for the STP units 3 and 4 COL.*

Comment: I would also ask that you hold scoping meetings in Houston, which is down wind, as is Dallas/Ft. Worth, from any potential accident, in Austin and San Antonio, where the cities could potentially be partners, and to let more people speak up and be part of this process. (1722)

Response: *This comment expresses opposition to NRC's scoping process, but provides no specific information on the NRC's environmental review of the STP units 3 and 4 COL application. Therefore, this comment will not be considered further in regards to the NRC EIS for the STP units 3 and 4 COL.*

Comment: In the case of a nuclear power plant, the NEPA process is interrelated with the licensing, public participation is through filing petitions to intervene. A key document that could provide information upon which intervenors could build contentions, is the final environmental impact statement. Yet the 60 day clock has started on intervention petitions as soon as the NRC accepted the application for docketing, so we now have a deadline of February 25, with no date even set for a draft environmental impact statement. The EIS will not even begin before the final deadline for intervenors to file. (1722)

Comment: And the first concern I would raise is one that's already been mentioned, which is the time factor, that there is a feeling among anyone who analyzes the application and analyzes the environmental report that 60 days simply is not enough time to have a logical and reasonable assessment, particularly when there's new information coming in. I do take note of the issue you raised earlier, which is one can raise contentions later on if new information comes in. (1706)

Comment: I spoke to Mr. Barrs earlier and, again, was informed that the safety review is not complete. And even so we as citizens are being asked to have contentions ready in just 20 days. Something tells me that that safety review will not be done during that time. How can we read it, analyze it, get experts, and prepare a case? That is not right. It is not valid. This -- and other reports -- the safety review and the final environmental impact statement should be finished before the licensee procedure goes forward and before citizens have to raise their contentions. (1722)

Response: *These comments express opposition to the NRC's timeline for filing intervention petitions, and provide no specific information to the NRC's environmental review of the STP units 3 and 4 COL application. Therefore, these comments will not be considered further in regards to the NRC EIS for the STP units 3 and 4 COL.*

Comment: The NEPA law prohibits irreversible or irretrievable commitments of resources prior to the completion of the EIS. That involves the work that the NRC does on the permit. So basically what's going on is that we have docketing of a license application for two nuclear reactors that is grossly incomplete, forcing potential intervenors to decide on whether to pursue intervention, and to decide on what issue or issues to pursue without a complete application available. (1722)

Response: *Section 102(2)(C)(v) of NEPA requires that an EIS include information on any irreversible and irretrievable commitments of resources that would occur if the proposed action (approval of the COL) is implemented. Irreversible and irretrievable resource commitments are relevant to the use of nonrenewable resources and the effects that the loss of use of these resources may have on future generations. These issues will be discussed in Section 11 of the DEIS. The remainder of this comment expresses opposition to the NRC's timeline for filing intervention petitions for the STP units 3 and 4 COL, and provides no specific information regarding the associated environmental review.*

Comment: We really are not looking for secrets. Our letter of intent in June was published on the NRC website, was available in the public document room. There were no secrets about our announcement of the new units. (1741)

Response: *This comment makes a statement of fact about the Notice of Intent for the STP Units 3 and 4 COL application, but provides no specific information on NRC's associated environmental review. Therefore, this comment will not be considered further in regards to the NRC EIS for the STP units 3 and 4 COL.*

Comment: There's something called the Design Criteria Document, and that's called the DCD. I started looking at this license application online and I found a whole section that said incorporated by reference in the DCD. It took a long time to find out what was a DCD. And then when I tried to call and get answers I couldn't get them. Tonight I was informed by Mr. Kallan that that document is available. Unfortunately it is available only in Washington, D.C. in the reading room of the Nuclear Regulatory Commission. That is a document that we need. That is the design criteria for the two advanced boiling water reactors that NRG wants to build here. That is a document that we need in our hands to effectively be able to write contentions to submit them in a timely manner. (2123)

Comment: Today is February 5. Our contentions have to be submitted in 20 days. I would like to officially ask when will the DCD be available. The licensing procedure should be halted immediately until that is available. (1722)

Response: *These comments express opposition to the limited availability of the Design Criteria Document during the period for filing intervention petitions. These comments provide no specific information to the NRC's environmental review of the STP units 3 and 4 COL application, therefore, these comments will not be considered further in regards to the NRC EIS for the STP units 3 and 4 COL.*

Comment: In section 5.4.1 of the environmental report there is a section of radiological impact and exposure pathways. Here is says -- and I will quote -- Radioactive liquids and gasses would be discharged to the environment during normal operation of STP 3 and 4. The released quantities have been estimated in Tables 12.2-20 for the gasses and Table 12.2-22 for liquids of the ABWR DCD. So the documents containing the quantities of radioactive material that would be released during normal operations are not yet available to the public. (1722)

Response: *This comment expresses opposition to the limited availability during the scoping period of documents containing the quantities of radioactive material that would be released during normal operations. This comment provides no specific information relevant to the environmental review of the STP units 3 and 4 COL application and therefore will not be considered further in the EIS.*

Comment: In the old days we used to have a PSAR, a preliminary safety analysis report. Now we don't have that. Now we have an FSAR. How on earth can anybody call that thing final. It's totally incomplete at this time. We don't have to fib to each other. It's not done. It's not even close. Okay. We need to extend the comment period because the information is not there. (1749)

Comment: The other part of this that's a real hard spot with me because I am an old reactor operator is it is totally inappropriate to license operation on a woefully incomplete safety analysis report. I don't know how the devil you guys ever came to that conclusion, but that needs to be looked at seriously. (1749)

Response: *This comment expresses opposition to the length of the NRC's scoping comment period due to a perceived lack of safety information. The safety review is outside the scope of the environmental review process and therefore this comment will not be considered further in the EIS for STP units 3 and 4.*

Process-NEPA

Comment: justifies moving forward - NEPA requirements [The commenter was questioning if there should have been a NEPA review prior to accepting the application to justify moving forward with the process.] (1722)

Response: *An NEPA environmental review could not have been conducted prior to accepting the application because the NRC would have had no project-specific information on which to base its review. The comment provides no new information relevant to the environmental review process and will not be evaluated further.*

Comment: I'd also like to request additional scoping meetings regarding the environmental report. There are many people I know of in Austin who could not make this trip who would like to comment in person. There are people in San Antonio and Houston as well. I would urge you to set up scoping meetings in those communities for this environmental report. (1722)

Comment: We also deserve and request that the NRC conduct public hearings in San Antonio on those [energy] alternatives and the environmental impacts of STP 3 & 4 as part of the scoping process. (1731)

Response: *Although NEPA does require federal agencies to initiate a scoping process, the decision of how to implement scoping is left to the agencies' discretion. It is the policy of the NRC to involve the public in the commission's decision-making process and therefore they elect to conduct open public scoping meetings in association with their environmental review process. Meetings are generally held in a location to reach the highest population that will experience the most direct environmental impact as a result of the proposed action. In the case of STP units 3 and 4, this population is located in the area of Bay City, Texas. The scoping period is open for 60 days and during this time, the public and other agencies are welcome to also submit written comments. The NRC will hold additional public meetings after the DEIS is published. Separate meetings will be held by the NRC in association with the safety review process.*

Related Federal Projects

There were no comments for this category.

Site Layout and Design

Comment: So how come we learned today that the design of record is by Toshiba? I think there's a big mess going on here that we don't know about.

Response: *The applicant experienced irresolvable issues with the vendor originally identified in the application. The type and design of the reactor did not change as a result of the change in vendors, therefore, the reactor-specific information provided in the application is still valid for the analysis.*

Comment: The advance boiling water reactor in Japan, there's four of them in operation in Japan, was developed as a joint venture between General Electric, Hitachi and Toshiba. They all jointly own that design in Japan. GE took that design and got it certified in the United States. Where did that design come from, you asked about the safety, what is this, what is the safety record. We've been operating boiling water reactors in the United States since 1960. The boil water reactors, through each generation, have evolved into -- further and further involved into a more advanced design. When GE and Hitachi and Toshiba went to develop the advanced boiling water reactors, they started with the BWR-6, the latest design that's currently in operation in the United States. They took that design and they looked at the rules under Part 52, what they needed to address, and they looked at the things that were bothering them about the BWR-6 that didn't work as well as they wanted it to, things they could make it safer, things that make it more reliable, they addressed those issues and developed the advanced boiling water reactor. It's very similar in operation and design to the BWR-6. We have many, many, many years of experience operating those plants. (1740)

Comment: [The ABWR's] lineage is over 60 years of operation in the United States and around the world. And the plans that we're looking at are an evolutionary design that's based upon the best that was in the United States. The design's certified by the NRC, and meets all U.S. standards. (1741)

Comment: Besides the good operating record that we saw with the advanced boiling water reactors in Japan, we choose them also because of their record associated with on-time construction, on-budget cost, and on schedule. And that performance, we believe we can replicate in the United States. (1741)

Comment: This technology [ABWR] has a long lineage in the United States. The design that has been built in Japan was predicated by 60 years of operations of boiling water reactors in the United States as a evolutionary design from our very best in the United States, the BWR6. And it's better. It's a G.E. design. It's been certified by the Nuclear Regulatory Commission. And it meets all U.S. standards. We [STP] chose the ABWR because of the operating record that it has, but we also chose it because of the record that it has for being constructed on time and on budget. (1741)

Response: *These comments are general in nature regarding the advanced boiling water reactor (ABWR) design chosen for Units 3 and 4. No new information relevant to the environmental analysis was provided and therefore the comments will not be evaluated further.*

Site Redress

There were no comments for this category.

Socioeconomics

Comment: Units 1 and 2 provide safe, reliable power to millions of Texans. As Mark said, that drives that economy of Texas. And it brings millions of dollars of benefits to Matagorda County and the surrounding area. (1741)

Comment: We believe that the benefits to Matagorda County will be significant, not only just the jobs that will be created, we've talked about the 800 permanent jobs, the 4,000 construction jobs, but we believe it'll have a significant positive affect on the quality of life in Matagorda County. (1741)

Comment: The STP 3 and 4 expansion, as has been mentioned earlier, would bring about 800 new jobs to the county. It's been stated that we need jobs, and we do because our high school students need opportunities that are not here now, our college-age students are going away from the county after they

graduate because there's nothing here to bring them back, what limited job we have. Also, we have a number of under-skilled, or under-employed people here who are looking for new opportunities to increase the career potential that they have, and that they could stay in the county as well. (1728)

Comment: The percentage of new employees living here is important to us. Right now we have about 60 percent of the 1200 employees that STP has living in the county, and we would like to have an equal percentage or higher of the new hires coming with 3 and 4 that would be here. They would be able to purchase homes and cars here, groceries, retail activities, they would use the services of our banks, our medical facilities, insurance, utility service providers. And if we could get 600 of those 800 living here, that would generate another 1,000 secondary support jobs. Those new employees' salaries will circulate in the community and that will expand it economically. (1728)

Comment: [W]e're beginning to see the impacts already of the anticipation of Units 3 and 4. We saw new retailers open up in Bay City in 2007. We had new retailers who have purchased properties in Palacios and in Bay City, and there's new construction in Palacios and Bay City in anticipation of this larger customer base that is going to be here. So these businesses are coming, and they're expanding our tax base and our employee base. (1728)

Comment: STP is looking at about 5,000 construction -- temporary construction workers here over a six year period. ... At maximum construction period they're looking at about 4,000 workers for two years, but then they would ramp down. ...[T]hose living here are going to spend most of their money here. Those commuting in are going to spend some of their money here buying gas and refreshments as they go in and out of the county. That's going to create a strong financial benefit to our local businesses and attract some new businesses. (1728)

Comment: We are strong supporters of STP. What community would not welcome a $6.4 billion investment in their community? I mean, this is great. We're talking about 8,000 construction jobs during peak, 800 -- I mean 4,000 jobs, 800 permanent jobs. (1742)

Comment: I'm indeed pleased to be here tonight and have a chance to talk about bringing new reactors to the South Texas Project site and increasing the capacity of the South Texas Project. It's clearly a strong boost for Matagorda County. It's important for Texans and Texas, for energy independence, and having adequate supplies of electricity, which drives our overall economic engine that keeps our society going. (1740)

Comment: Units 1 and 2 provide clean, reliable power to millions of Texans. ... We also provide millions of dollars of benefits to Matagorda County. (1741)

Comment: We think that the benefits associated with Units 3 and 4 will be significant for Matagorda County and the surrounding communities. It's not only the jobs -- the 800 permanent jobs and 4,000 construction jobs -- bit the quality of life that we believe the economic impact of Units 3 and 4 will bring to this area. (1741)

Comment: Palacios is going through an economic change. The shrimping industry is on the way down and it will never return. The Harris and Galveston County Council of Governments, which is 13 counties, including Matagorda County, recently started last year making plans for an additional 2.5 million people coming to our area by year 2015. (1720)

Comment: As far as the economic impact to Matagorda County, ... we've got businesses here that have ... been here since the early 1900's. ... Yes, we have new industry coming in. ...But we have these old businesses too. ...down in Palacios ...Blessing and Matagorda and Clemville and Bowling ...all these communities around close that are going to have impact by Units 3 and 4. Also, it's going to secure future for our children and our children's children. (1745)

Comment: The economic impact on the state of Texas will create -- or one nuclear plant would create $9.2 billion statewide from one reactor and 5,564 jobs. (1718)

Comment: The focus of the Matagorda County EDC and my job is to bring new economic development to Matagorda County. And this, ..., is a chance of a lifetime that most economic developers would dream of. The value of that STP is talking about investing equals the combined -- it exceeds the combined value of the eight largest industrial projects in Texas in the last four years. It exceeds those. So that is big. That is economic development right big. (1728)

Comment: We're after STP 3 and 4 for a number of reasons ... We want to attract their employees to live here. If you can get 3 and 4 -- a major percentage of the employees of 3 and 4 to live here they're going to buy homes and cars. They're going to buy their groceries, their retail products. They're going to use the services of our banks, our medical facilities, their insurers, utility companies, and our various service providers. That's going to help all the existing businesses in the community. It's going to attract more businesses to the community. If we could get 600 of 800 to live here that would generate an additional 1,000 service sector jobs. And that is good economic development. (1728)

Comment: The temporary construction workers that are going to be here will be over a six-year period. ... And while they're living here they're going to be spending their money here. While they are commuting in and out they're going to be buying gasoline and refreshments and spending some of their money here. So that's going to create additional strong business for our local employers, our local businesses, and it's going to add and attract other businesses. (1728)

Comment: We saw some of this retail happening already, as was mentioned earlier. We had new retailers coming in in 2007. We had more of them buy -- more retailers buy property in Palacios and Bay City for new facilities. There are new retail facilities under construction because they are anticipating an increased customer base. So this is adding to our employment opportunities and it's adding to the existing tax base, which we all need. (1728)

Comment: The plant location provides jobs on a regional basis without causing development problems, such as increased traffic, whlch would occur in a densely industrialized area. (1713)

Response: *These comments cite some of the projected favorable soioeconomic impacts on the community of plant construction and operation. These comments are covered within the exisiting scope of the DEIS.*

Comment: I think the first question that you all, in this community, may want to ask is, is this going to be a benefit to you, or will your taxes have to go up to pay for the infrastructure to support the growth of the plant, the additional hospitals and security systems, roads, schools and other issues. (1721)

Comment: Tax abatements for NRG will mean the community will bear costs in higher taxes. The community will have to come up with funds to build more public infrastructure. The new plant will require:1. New roads, new schools, a new hospital, and a paid fire department.2. How high will local cities have to raise taxes in order to build this infrastructure? (1710) (1721)

Response: *These comments briefly identify potential adverse socioeconomic impacts on the community of plant construction and operation, including required investments in community infrastructure. These topics will be discussed in the DEIS.*

Comment: I think that Matagorda County and Bay City are so much better prepared for two more units than we were for the first two units. I happen to have been on the city council at that time, and let me tell you, I believe at that time there were 13,000-plus construction workers here, which at that time it was the largest construction project in the United States at that time, or up to that time, or going on then. (1738)

Comment: Already, ..., advanced education has come to the city due to our partnership with the local community colleges and with Texas A&M. There's now a satellite campus at Wharton Junior College in Bay City, we're teaching courses and there are students there today, and that did not exist a year ago. And that's all because of Units 3 and 4. (1741)

Comment: Ms. Dancer talked about the security of the workforce. I'm sorry if, as we went through our deliberations on how we should best manager our costs, that that caused anxiety within any of employees. But the truth is, we outsourced not one job. Not one. And we have changed our outlook. We've gone from an outlook of constriction to one of expansion, and that's the bright future for STP Nuclear Operating Company, and that's the bright future for Matagorda County. We prefer local talent, and the onsite campus in Bay City is part of our commitment to try and attract and retain that local talent. And we have many other activities that'll go forth in the future to bring that workforce to Matagorda County. (2123)

Comment: With the announcement of expansion to Units 3 and 4, we have the opportunity to bring industry, education, and government together to solve a huge problem, but it was a good problem. ... In just a matter of months we came up with a degree program, associate degree program called Power Technology, which we have students enrolled in already today, and the Mid-Coast Education and Industry Alliance still meets

quarterly. We are continuing to address the issues to see how we can improve our education systems and make this a great place to raise our young adults and have our young adults come back and raise their families for many, many years to come, creating another huge strength for our community. (1727)

Comment: The city of Bay City is ready to meet the challenges of the growth and expansion of Units 3 and 4. The city three years ago passed a $6 million bond issue to repave all the streets in the city of Bay City. We're also actively engaged right now in creating a diversion road around our community to help alleviate traffic that we anticipate coming. (1742)

Comment: With this announcement we had the opportunity to bring together industry and educators and solve a really huge problem. But it was a good problem, especially for this community that has had traditionally double-digit unemployment. Our problem was how are we going to meet the demands of our local industries' needs for all of the jobs that are going to be created. ...Within just a matter of months we developed the idea of coming up with power technology, which is an associate degree program that's being taught to our students today. (1727)

Comment: STP has made Matagorda County a much strong economic entity by its presence. It is our largest private sector employer. Units 3 and 4 would add another 800 jobs. And those jobs, as has been mentioned before, are going to be opportunities for our high school graduates, our graduates at colleges to come back to school -- come back from school and work here and for people who are underemployed to improve their education and have better career opportunities. (1728)

Response: *These comments discuss community responses designed to take advantage of expanding economic opportunities expected as a result of plant construction and operation. Such activities are part of the context for economic impact analysis and will be discussed in the DEIS.*

Comment: So where initially you had a workforce that by default had to be based in the local economy, that paradigm has changed. So as the economy became more global, in part due to advances in the internet and electronics communication age, STP began to court workforces elsewhere, workforces without roots in Matagorda County. And suddenly, all of those jobs, all of those careers that we had been promised, and that had largely come to fruition, suddenly lost their stability. (1733)

Comment: If there is any doubt that STP's ownership didn't have loyalty to their workforce, or their location, pre-announcements of Units 3 and 4, Frank Mallen ended that with a comment spoken to a group -- a senior manager, with a comment spoken to a group of recently outsourced employees when he said, It's all about the money. That's the most poignant and honest thing that STP management has presented to this community so far. (1733)

Comment: Fortunately for us, we have hindsight and we can see what building two new nuclear reactors could bring us. We can see now because we're 30 years later from the same thing happening before. Our unemployment rate is still well above the state average, our school districts are still extremely poor, and the owners and operators of the plants still don't live here or show loyalty to our community. (1733)

Comment: When they started bringing executives in to prepare for 3 and 4, guess where they relocated those executives to? Lake Jackson. All the -- and these are the same people who tell you they have great love and loyalty for Matagorda County and that we have the infrastructure to support the plant growth and to support all the new employees here. (1733)

Comment: As far as the concerns I have is the number of STP employees who choose to live outside of Matagorda County. I understand. They've got beautiful country clubs and stuff like that every place else. But I would like to work with both STP, our local officials, and Matagorda County to make Matagorda County the preferred residence of not only the construction families it will bring, but also the management and employees of STP. (1745)

Comment: While the company postulates that it will need between 5000-6000 construction workers, how many of them can be found locally or in the region with other major power plants being proposed or under construction? There hasn't been a new reactor ordered in the US for decades. The knowledge and skill to build the reactor design is in Japan. 1. Who will NRG hire to build and operate the new plant? 2. Will they have to rely on international labor? (1710) (1721)

Response: *These comments involve choices by the applicant and their contractors on where the construction and operating workforces will come from, and choices by the workforce concerning where they*

will live while working at the proposed plant. These factors affect the size of the local resident workforce and the potential socioeconomic impacts and will be discussed in the DEIS.

Comment: [E]mergency planning ... has an aspect to economic development that often is not perceived. A lot of the business that I'm talking to -- the industries -- have a concern about the Texan fire services -- emergency services. And when we mention the types of planning that are undertaken in Matagorda County because of the presence of STP that gives them a good comfort level that their needs will be met also and they can participate as a member in this emergency planning and response within the county. (1728)

Comment: STP is a major financial supporter to a lot of the activities in the community as has been mentioned -- the community events, the organization of the civic activities. Many of these events, activities, and so forth could not exist without the financial support of STP. (1728)

Response: *These comments discuss past actions of the existing plant management and employees for activities that support the community. They provide some context for expectations regarding future behavior. Although this type of response is not an inevitable socioeconomic consequence of construction and operation, past performance will be used as part of the context in the DEIS discussion.*

Comment: If we can do energy efficiency less expensively than building this plant, and put Texans to work as opposed to people in Japan or in Russia or in Africa that will be mining this uranium. Wouldn't it be better to have the jobs and money stay here in the United States? (1721)

Response: *This comment expresses the belief that investments in energy efficiency would be less expensive and would provide more domestic jobs than an investment in nuclear power. It does not ask for an analysis within the EIS of the job and cost consequences of the nuclear fuel cycle compared with energy efficiency. Job and cost impacts will be identified and quantified to the extent possible in the EIS.*

Comment: I do think that Bay City is being presented with a false choice, either two new nuclear reactors, or you're not going to have any jobs, when, in fact, there are alternatives to that, to those two options. (1731)

Response: *This comment states that there are alternatives to constructing and operating the proposed plant. Chapter 9 of the EIS will discuss the socioeconomic impacts of alternative technologies and sites.*

Support-Licensing Action

Comment: I urge you to grant the license for 3 and 4. (1742)

Comment: We're also -- like I said, Matagorda County and Bay City are much better prepared and I think we can handle it. I have confidence that they're going to do the best job. I don't know any industry that is absolutely safe. (1738)

Comment: STP, and all the process plants have been great neighbors and partners in our community, especially in the environmental section. So I don't believe there's any reason why that we should go against this type of investment for our community. (1720)

Comment: Let me tell you something about the environment. The nuclear plant has been here through every bit of it. A very sensitive environmental location that exists side by side with STP's 1 and 2, and we certainly hope 3 and 4. (1723)

Comment: And as an economic developer, many of us only get to experience this kind of expansion once in a life time. So it's real important that we take advantage of the opportunities that have been put in front of us. THIS USES A DUPLICATE COMMENT NUMBER. THE CORRESPONDING TEXT IS NOT HITHLIGHTED IN THE CORRESPONDENCE. IT CAN BE FOUND A FEW SENTENCES BELOW COMMENT # 78. (1727)

Comment: My job, and the focus on the Matagorda County EDC is to bring new industry to the county, to increase our job base, and to increase our tax base. And the expansion of 3 and 4 is good economic development. (1728)

Comment: As -- both as a citizen of Matagorda County, and as your sheriff, I not only welcome the addition of Units 3 and 4, I look forward to it. (1719)

Comment: I want you to know that Matagorda County is a stronger and a better community because STP is here. We support the additions of Units 3 and 4, they're going to add significantly to the economic vitality and strength of Matagorda County. (1728)

Comment: As you're all aware of, there's an acronym called NIMBY, not in my backyard. Commissioners, I'm here to tell you, I stand for PIMBY, please in my backyard. (1742)

Comment: Matagorda County is stronger and better community because STP is here. We support the addition of Units 3 and 4. They will add significantly to the economic vitality and the strength of Matagorda County. (1728)

Comment: The rest of the world is leaving us behind in this technology. We used to be the leader. We used to train the entire world in nuclear energy, in the development of these plants, training their people. And now where are we? We haven't done anything in over two decades. We're way, way behind. We need this technology returned to this country. We need our engineers and our scientists to be trained. And this is a good start right here. (1753)

Comment: I'm excited about the possibilities of Unit 3 and 4 coming on line. It will be a good thing for Matagorda County and the people who live here. (1719)

Comment: [W]e look forward to the challenges that Units 3 and 4 are going to present to us. But we look forward to our partnership working with STP. (1742)

Comment: If those the most sensitive that our nature provides can survive and grow and be so prolific as to be heard on an evening's night then I welcome and hope that they are successful in their bid to build Units 3 and 4. Economically it would benefit our community, county, and surrounding counties. In the long rage our children would benefitdramatically. And so I wholeheartedly support it.... (1744)

Comment: So as far as the environmental impact is concerned it's negligible what we've had so far and I can't help but think that Units 3 and 4 would also be the same way. (1745)

Comment: I don't have much to say except that I'm 100 percent for the building of this two reactors for Matagorda County. Economically we need it. And the safety is -- and the environmental impact are excellent. We've had 20-some-odd years with no accidents. (1747)

Comment: So I'd like to challenge you to join me in embracing this opportunity. (1727)

Comment: I'm telling you, common ground means we are going to have to take care of ourselves, and we are going to have to attract the industry. And Units 3 and 4 give us the opportunity for our kids to work for more than $6.00 an hour and try to raise a family and try to buy a house. (1723)

Comment: I have many friends in Bay City, throughout the county. I'm concerned about them and their well-being. I feel that the Bay City plant has been operated safely, and I support the addition of Units 3 and 4. (1751)

Comment: We welcome 3 and 4. They're good for the county. (1728)

Comment: STP's expansion plans allow a positive regional impact on the United States energy crises without disrupting important migratory wildlife patterns. (1713)

Comment: We have a copy of the permit submitted to the Commission and without discussing the more technical aspects, which are beyond our expertise, we believe that any design problems. if there are any. can be overcome by engineering. (1713)

Comment: The environmental relationship between STP and Matagorda County's goals of encouraging development of natural resources sets a positive example for other areas faced with the same problems. Please approve STP's permit application. (1713)

Comment: Originally the site was designed for two additional reactors. Given the original design and past record it seems that the license should be granted. (1754)

Response: *These comments express general support for the South Texas Project proposed nuclear units 3 and 4 or the associated COL application. They provide no information specific to the scope of the COL EIS and will not be considered further in the NRC staff's environmental review.*

Support-Licensing Process

Comment: Today is a great day for our city. I think that if the forefathers of our country was in the back of this room tonight they would be proud of the process that we had all day today at these meetings. This is what democracy is all about. People can come up and give their concerns and their opinions and be appreciated for it. (1720)

Response: *This comment provides only general information in support of the U.S. Nuclear Regulatory Commission's COL process. It provides no information related to the scope of this EIS and will not be considered further in the staff's environmental review.*

Support-Nuclear Power

Comment: I support, personally, clean and safe nuclear energy. (1718)

Comment: I think we're falling behind in the world market. We talk about what the cost of energy is. Nuclear energy is, in my opinion, our best alternative to replace natural gas for making our power needs. I want to say that obviously nuclear energy is low cost power generation, clean energy, and zero gas emissions. Not anywhere like a coal or a gas power plant. (1718)

Comment: I would like to let you know that the State of House -- the House of Representatives, we had two major issues this year in support of nuclear power in the Texas. One of those passed unanimously, 139 to 0, and the other passed 135 to 4. I'd just like -- I say that to let you know that the representatives, the people's representatives in the House of Representatives in the State of Texas obviously feel that nuclear energy is important for the State of Texas. (1718)

Comment: I believe in safe, clean nuclear energy. I don't know that I could say that anywhere in the United States, but having been working in Matagorda County for the last 30 years, along with -- you know, around the nuclear plant, I believe that it's a safe environment for us to be able to live. (1718)

Comment: As your representative in the State Legislature I was asked to help pass 2.2 bills in the House of Representatives that had to do with nuclear energy. Both of those bills passed and the House of Representatives by the people's representatives. One of them was 186 to zero -- I'm sorry -- 138 to zero and the other was 137 to 4. I say this because it lets you know that the House of Representatives, who is elected by the people of the state of Texas, basically unanimously support nuclear energy in the state of Texas until we find a source that is better. (1718)

Comment: Nuclear provides reliable, low cost power in great quantities, clean energy with zero gas emissions -- greenhouse emissions. (1718)

Comment: nuclear is the best power that we have currently. The water that's being released from the plant has been cooled before it has been released, so there's little impact on the environment -- that the nuclear plant sites create the natural preserves as I was talking about. (1718)

Comment: STP has been such a good neighbor that we went after another nuclear power plant, because if one is good, then two can be better. And we were successful in recruiting Exelon to Matagorda County initially. Unfortunately the site did not prove suitable to their needs and they have gone elsewhere. But that showed that we are a welcoming and nuclear supporting community. (1728)

Response: *These comments express general support for nuclear power. They provide no information specific to the NRC's environmental review for the South Texas Project Units 3 and 4 COL EIS and will not be considered further.*

Support-Plant

Comment: I am a resident, or I have a home in Matagorda County, which I can see the lights of the nuclear plant from my house. I have never felt endangered from STP. As a matter of fact, I have a lot of friends that work over there. I have a boat, I fish, I spend a lot of time in the Colorado River, both upstream and downstream from the nuclear plant. (1718)

Comment: I want to tell you about STP. I want to put a human face on the corporate citizens of STP. Mr. Shepherd and his crew have created a culture of excellence and community involvement. (1742)

Comment: I came to Palacios seven years ago because I wanted to live close to the water. And I have four grandchildren -- three children, four grandchildren. And I've worked the last seven years to get them to live in Palacios. At this time they all do. And if I thought there was any danger whatsoever at that nuclear treatment plant, I would not put my descendants in that danger. It's good for us, it's a good place, they've been good neighbors. (1720)

Comment: So I am here as an advocate for nuclear energy, and for the South Texas nuclear plant. I believe they've been good stewards of the community, I think they're important, education is important to our community, they've worked hard to influence education and promote education in the community. (1718)

Comment: STP has been an outstanding corporate citizen that has brought amazing economic strength to Matagorda County. It has been a good industrial citizen. (1728)

Comment: I would like to say something about STP as a major financial supporter of the community. They have supported many of the community events, our organizations, and our civic activities. Without their support, many of these activities and events would not have happened. A larger and a stronger STP will enable them to continue their support, and hopefully to increase it. But equally, or even more important, is participation of tehir employees in the community. Individually they provide strong support within our churches, our civic organizations, our youth and environmental activities, school districts, and in our governmental units. (1728)

Comment: The culture that has been created by Joe Shepherd and his team is a culture of excellence in community involvement. There are a lot of things in this community that would not happen without their direct involvement. One is the American Red Cross. The American Cancer Society Relay for Life where they have raised over $100,000 the past several years because of the involvement of STP. The March of Dimes. The employees of STP sit on our city councils, our school boards, our economic development boards. They are committed. They are involved. If 800 quality citizens like that are going to be coming with Units 3 and 4 Bay City and Matagorda County are the beneficiaries. (1742)

Comment: The economic future of our area is very bright. And the South Texas plant is leading the way as a community partner in an environmentally friendly economic development. (1720)

Comment: And the STP employees are the most concerned and professional people that I've ever had the privilege of working with. They're great people. They do a great job. (1745)

Comment: And as the man has said about the frogs and the crocodiles or alligators what is the environmental impact? This is a closed section out there where everything that goes on is controlled by STP, and they keep it friendly to the environment. (1747)

Comment: 28 years ago ...I was the mayor of Bay City then. The city council passed a resolution supporting the plant: its construction, its operation. We had full faith in the integrity of the plant, the people that were going to run it, and the owners of the plant. Well, that hasn't changed any. ... I urge the NRC to speedy licensing and approve this plant. (1751)

Comment: Matagorda County has been associated with STP for a very long time and we believe both the plant and the County have developed a mutual respect for one another over the years. One of the goals evident In the partnership is the respect for our natural surroundings that STP has helped foster. Their regard for nature is evident in the places set aside on the plant grounds for migratory birds and butterflies among other forms of wildlife. This consideratlon helps Matagorda County create an economic development plan based on eco-tourism as stated in a study submitted to the City of Palacios in 2003. And evidenced in the Bay City Nature Park. (1713)

Comment: As we move forward in building a county that will sustain itself for generations to come, we must have a firm foundation upon which to anchor that building process. Matagorda County's foundation is the South Texas Nuclear Project. (1716)

Comment: That in a nutshell sums up the STNP credo, as I have observed it... a commitment to excellence in all that they undertake. (1716)

Comment: STP has safely generated/operated nuclear reactors for 20+ years without incident. There has been no adverse environmental impact during this time. (1754)

Comment: Furthermore, we need alternative sources for power; STP has been a stellar member of the community and they will provide an economic boon for the community. (1754)

Response: *These comments express support for the existing nuclear units 1 and 2 at the STP site. They provide no information specific to the NRC's environmental review for the proposed units 3 and 4 COL EIS and will not be considered further.*

Transportation

Comment: Transportation, how will the materials and the waste come in and out of this community? (1721)

Comment: [F]or us in San Antonio, this also raises other dangers. In 2004 we had 21 derailments in our city, 21 derailments that killed five people; one of them spilling chlorine gas in the community killing four people instantly. So how is this [uranium] being transported? Is it going to be coming through our backyards, of which -- you know, we want to make a clear statement that we would not, and do not, want this type of deadly waste passing through people's backyards. And it's literally passing through people's backyards when you look at the train system in the City of San Antonio. (1726)

Comment: [H]ow is the fuel going to be transported into this community? How is waste -- if they ever find a place to put the waste, how is going to be transported out of this community? What we found out in San Antonio after 21 derailments, major derailments, occurred in 2004 is that you can't get any of that information. You can't find out the routes that they're taking. They won't tell you what's on those trains, and there's no way to know that. So how can we possibly evaluation the risk to our communities when we don't even know where this stuff is going to be transported through, and how to protect it? (1731)

Response: *The environmental impacts of transporting fuel and waste to and from the STP site will be evaluated, and the results of the analysis will be presented in Chapter 6 of the EIS. The transportation of radioactive material to and from the STP site, including unirradiated fuel, spent fuel, and radioactive waste, will be conducted in accordance with Federal regulations. The U.S. Nuclear Regulatory Commission (NRC) and Department of Transportation (DOT) are the lead Federal agencies in charge regulating the safety of shipments of radioactive materials. The NRC establishes requirements for the design and manufacture of packages for radioactive materials (10 CFR 71, Packaging and Transportation of Radioactive Materials). The Department of Transportation regulates the shipments while they are in transit, and sets standards for labeling and smaller quantity packages (Title 49, Transportation, U.S. Code of Federal Regulations).*

Uranium Fuel Cycle

Comment: The EIS should examine the likelihood that a solution to the high level waste disposal issue will be forthcoming any time in the near future and the consequences for STNP, such as indefinite on-site storage, if such a solution is not forthcoming. (1705)

Comment: The ER is short on details on how the proposed plant will deal with thousands of curies and tons of low-level and high-level waste to be generated by the plant. Radioactive waste management in the U.S. has been and continues to be nightmarish and difficult. (1706)

Comment: There are now only three facilities which are taking low-level waste from nuclear plants in the States of South Carolina, Utah and Washington. However, none of the three will currently take all types of low-level radioactive waste from Texas power plants. Thus, the [EIS] must address how much of which kinds of low-level radioactive waste will go to which facilities must be addressed. In addition, because there is the real possibility that no facility will be found in the short-term for the most radioactive of low-level rad waste, an EIS must address the possibility and impacts of permanent disposal of low-level rad waste on-site. (1706)

Comment: If the ER fails to adequately assess the generation, storage and disposal of low-level waste, the oversights in terms of high level radioactive waste are much greater. First of all, the ER assesses the transport of spent fuel (high level waste) to a depository, using Yucca Mountain as an example. Yet both the NRC and NRG know that even if Yucca Mountain were to open sometime in the first years of operation of STP No. 3 and 4, storage of spent fuel would be taken up by existing nuclear plants. There has yet to be, and does not appear to be any resolution of the question of how to dispose of high level radioactive waste. (1706)

Comment: I think it's irresponsible to be considering permitting new reactors when we have yet to permit or identify a viable site to dispose of the waste. (1731)

Comment: Even assuming that that worst case doesn't happen, you still have one non -- one problem that there is no good solution for. And that is what you're going to do with nuclear waste. I don't believe the time frame. I think it should be longer. But the federal government says we're going to have to store high-level waste for 10,000 years, that we're going to have to protect for 10,000 years. (1736)

Comment: I assure you we have the capability at South Texas to store nuclear waste. We have the capability to store all the waste, the high-level waste out of Units 1 and 2 through 2028. We have the capability for 10 years of storage in the new advanced boiling water reactor design, and there are technologies to allow us to develop storage that goes much beyond that, and basically we can store it as long as we need to, until the federal government fulfills their contact and takes possession of that spent fuel and ultimately disposes of it. Ten thousand years? Not 10,000 years. That fuel becomes less radioactive than what we dug out of the ground originally in a few hundred years. But, yes. (1740)

Comment: What about wastes? The whole community of -- the whole question about the plant being permitted is dependant upon your ability to dispose of wastes. ... And we do not yet have a licensed and operating low-level radioactive waste disposal site, which means that the disposal, up until we get those things permitted, if we ever do, is here in this community. (1721)

Comment: With a nuclear power plant, the waste issue has not been solved. Yucca Mountain has been cutting back the workers to 15 now. And to bring more of this into the community is putting the community at risk. (1722)

Comment: A third issue is radioactive waste. It's the big bugaboo in the room, nobody likes to talk about it. But the fact is, you know, for 50 years we've been talking about how we're going to deal with radioactive waste. We still haven't dealt with it. We still don't have a final repository for radioactive waste. (1706)

Comment: I saw some discussion about, you know, the transportation of the spent fuel rods to a final repository, and about the amount of space you would have at STP 3 and 4 to have these spent fuel rods. But I didn't see the contingency. What happens if we never -- you know, what happens if we are never able to locate a place to put all this waste? Does it just sit there forever? Do you have the capacity? (1706)

Comment: Similarly with low-level rad waste, you know, there are currently only three sites that are taking it, one of the which, Barnwell, has now said they're not going to take it. We haven't yet had the Andrews County site open up. Where is the contingency in here for what to do with that waste? (1706)

Comment: [I]n the 50 years of the nuclear industry we have yet to identify a safe way to dispose of the waste. And that is an environmental impact of the South Texas Project. High-level radioactive waste stays deadly for tens of thousands of years. And it's a real engineering challenge to think of how to contain such a thing on such a geological time scale. So I think that the NRC needs to consider all of those impacts in the environmental scope of their review. And it's a real engineering challenge to think of how to contain such a thing on such a geological time scale. So I think that the NRC needs to consider all of those impacts in the environmental scope of their review. (2123)

Comment: Yes, we [STP] generate high level nuclear waste. We know how to store it. We store it safely. We have the capability to store it safely for as long as we need to store it. Ultimately the federal -- we have a contract with the federal government to take possession of that material and dispose of it. Until they do so, we'll store it and continue to do so in a safe manner. I want point out our waste is not in a tin building; it is a concrete building. The wall is about two feet thick. (1740)

Comment: And right now we've got a crisis because the scientific process that we're looking to manage the nuclear waste South Texas 1 and 2, 3 and 4, the 104 operating reactors around the country -- right now there's only one site that's being looked at. And that's in Yucca Mountain, Nevada. And the issue is is that if this were a scientific process you would be looking at least three sites. And you would be looking -- likely you would be looking at Deaf Smith County, Texas, as one of those other sites. And it wasn't until 1987 that Deaf Smith County, Texas, was taken off of the list and Yucca Mountain, Nevada, was the only one that was left. (1748)

Comment: Now, the issue is is that we believe and -- that you should be able to raise this issue of nuclear waste within the context of building more reactors. But currently -- the current NRC process says that we are not allowed to raise that because of what they call the nuclear waste confidence decision. And that decision was made by rule-making with the U.S. Nuclear Regulatory Commission that said someday somewhere somebody somehow is going to figure out what to do with, you know, right now 55,000 metric tons. You add more reactors -- it's going to be up to 100,000 metric tons, 120,000 metric tons. And right now the only place we're looking at is to send it off to a seismologically and volcanically active area. And it's not for sure that it's going to happen. Right now the Yucca Mountain process is alling apart. And, in fact, there is no confidence. (2123)

Comment: How can the generation of waste which we still do not know how to safely store be justified? (1709)

Comment: No high or low level site has yet been permitted Recognizing that generating nuclear energy produces tons of high and low-level radioactive waste that remains dangerous to living systems for tens of thousands of years, and radioactive and toxic waste is produced at every stage of the fuel cycle, including plant operations, the EIS should address waste issues thoroughly. (1710) (1721)

Comment: There is still no ways to safely store nuclear waste for the millions of years during which it will remain radioactive. (1712)

Comment: Nuclear power plants are not a clean energy source and they are not long-lived. Radioactive waste remains dangerous to human health for thousands of years, and no country in the world has found a solution for disposing of it. (Public Citizen April 2006). These plants have a life span of only 30-40 years, after which they must be upgraded at huge costs or decommissioned, leaving the site contaminated for thousands ofyears. (Southwest Workers' Union October 25, 2007). (1715)

Comment: It has also long been common knowledge that there are health and safety concerns associated with the production of nuclear power. We all know there are huge quantities of nuclear waste produced for which there is no satisfactory storage solution, and there are documented accidents resulting in contamination due to leakages. (1717)

Response: *Onsite storage and offsite disposal of spent nuclear fuel are Category 1 issues. The safety and environmental effects of long-term storage of spent fuel on site has been evaluated by the NRC and, as set forth in the Waste Confidence Rule at 10 CFR 51.23 , the NRC generically determined that "if necessary, spent fuel generated in any reactor can be stored safely and without significant environmental impacts for at least 30 years beyond the licensed life for operation . . . of that reactor at its spent fuel storage basin or at either onsite of offsite independent spent fuel installations. Further, the Commission believes there is reasonable assurance that at least one mined geologic repository will be available within the first quarter of the twenty-first century and sufficient repository capacity will be available within 30 years beyond the licensed life for operation of any reactor to dispose of the commercial high-level waste and spent fuel originating in any such reactor and generated up to that time." The comment provides no new significant information, and, therefore, will not be evaluated further.*

Comment: The low level waste analysis should examine the likelihood of off-site storage being available for such waste. (1705)

Response: *Radiological wastes will be addressed in section 6 of the EIS.*

Comment: Waste produced from uranium mining, including tailings, is another waste which should be included in the analysis. (1705)

Comment: Chapter 10 of the Environmental Report does not discuss the land that will likely be used to mine, process, enrich and fabricate uranium fuels, and the waste and air emissions that are generated in

that process, nor does it discuss the longterm implications of the low-level and high-level waste generated by the operations of the plants, including their potential impact on water resources and human health. (1706)

Comment: [T]here is no discussion of where uranium is likely to be mined as a result of the potential additional nuclear plants. Thus, while the ER suggests that uranium is a resource that is mainly imported and that the uranium mining industry in the U.S. has been depressed in recent years, the Sierra Club notes in Texas, there are currently 19 exploratory permits for uranium mining that have been granted or are being processed by the Railroad Commission of Texas since mid-2006, that four uranium mines are currently operating in Kleberg and Duval Counties, and that two new applications are being processed by the Texas Commission on Environmental Quality for mines in Duval and Goliad Counties. The EIS should assess different scenarios and the likely impacts, including in South Texas on water resources and health impacts. (1706)

Comment: If NRC is to license a new nuclear plant, it must be based on the impacts from the whole uranium cycle that will result. For 50 years, nuclear power has been presented as a clean energy source, even as communities at Three Mile Island, Pennsylvania in West Valley, New York, in Sheffield, Illinois, Hanford, Washington, Barnwell and a myriad of other locations were impacted from the generation and waste disposal, in some cases leading to deaths. Any EIS must address the full impacts so more communities do not suffer. (1706)

Comment: And then the source of uranium. We all think that the uranium will probably come from someplace else, and most of it will, but here in Texas we have a number of communities, particularly those around Karnes City and Kingsville where we have significant impact already to ground water as a result of uranium mining. We're about ready to get into another round of uranium mining in Goliad and Duval Counties. And the impact of the uranium extraction on those communities typically means that ground water is no longer safe. (1721)

Comment: And then also you have ... high-grade and low-grade uranium, so once you finish with the high-grade, when you enrich it you have to use energy to do that. So when you use low ...the low-level one, you have to use more energy just to get it so it could be used at the nuclear reactor plants. (1729)

Comment: While it's true that nuclear power plants don't emit carbon dioxide, one of the principle ingredients fueling global warming, the mining of uranium to fuel these plants is anything but clean. I'd ask all of you to consider the indirect costs associated with uranium mining. It's a nasty business that can pollute aquifers, and taint drinking water and irrigation for nearby residents. (1730)

Comment: Mining and enriching uranium results in radioactive contamination of the environment and risks to public health. Exposure to radon has been shown to cause kidney failure, chronic lung disease, and tumors for the brain, bone, lung, and nasal passage. The EIS needs to assess the impact of uranium mining in the regions from where STP 3 and 4 will derive its fuel. (1710) (1721)

Response: *Impacts from the uranium fuel cycle have been tabulated in 10 CFR 51.51 Table S-3, which is to be used as the basis for evaluating the contribution of the environmental effects of uranium mining and milling to the environmental costs of licensing the nuclear power reactor. Associated effects also discussed in the noted CFR include the production of uranium hexafluoride, isotopic enrichment, fuel fabrication, reprocessing of irradiated fuel, transportation of radioactive materials and management of low-level wastes and high-level wastes related to uranium fuel-cycle activities. Health effects from normal plant operation will be addressed in section 5.*

Comment: An EIS must assess the much more likely scenario that radioactive waste will be stored on-site well.... Forever. That assessment must include an assessment of any potential leaks, accidents or gases escaping from the containment zone. (1706)

Response: *Radiological waste will be discussed in section 6 and accidents will be discussed in section 7 of the EIS.*

Comment: In the economics analysis, the EIS should consider the burden on the public treasury potentially created by Units 3 and 4. For example, the Federal Government is already ten years behind in its promise to establish a long term repository for high level nuclear waste and remove such wastes from existing nuclear power sites. Based on that failure to perform, the Federal Government is having to pay for on site storage, amounting to billions of dollars. This expense is discussed in “As Nuclear Waste Languishes, Expense to U.S. Rises,” New York Times, February 17, 2008. (1705)

Response: *NRC regulation (10 CFR 50.75) requires the establishment of a decommissioning trust fund. Sufficient funds are required to be collected and placed in a secure trust that would assure decommissioning, including the disposal of low-level waste. Funds are also collected from licensees annually to defray costs associated with the ultimate disposal of high-level waste.*

Comment: It's mentioned in the application that you currently send it (low-level waste) to several locations. It seems like more detail would be needed so that we, the public, can be sure that this rad waste, both low-level and high waste, is taken care of. (1706)

Comment: I am concerned about the waste issues, and I am concerned about Matagorda County being essentially set up as a permanent radioactive waste site because there doesn't seem to be a solution for that one. (1733)

Response: *Radiological wastes will be addressed in section 6 of the EIS.*

Comment: [W]here is that uranium going to come from? We have at the Railroad Commission now 19 new exploratory permits for a uranium mine. To make the nuclear power plant you need uranium, uranium mining can have some environmental impacts here in Texas. So how are we going to make that if -- where that uranium's coming from, and what the total fuel cycle impacts are going to be. (1706)

Response: *The NRC staff evaluated the environmental impacts of the uranium fuel cycle including the impacts of fuel manufacturing, transportation, and the onsite storage and eventual disposal of spent fuel. The staff's evaluation accounts for the Commission's "Waste Confidence" decision embodied in 10 CFR 51.23 to the extent that decision applies to such impacts. The comment does not provide new information and will not be evaluated further.*

Comment: If you're looking at the enriching of uranium, you have to do -- and you have to do that at coal burning power plants as well. You know, so, one, maybe when it gets to the nuclear reactor here the pollution is not being produced, but every step of that process there's pollution that's impacting people, and once it arrives here at the South Texas Nuclear Project, then there's a huge question of radioactive waste which we have nowhere to put. (1726)

Response: *Impacts from the uranium fuel cycle have been tabulated in 10 CFR 51.51 Table S-3, which is to be used as the basis for evaluating the contribution of the environmental effects of uranium mining and milling to the environmental costs of licensing the nuclear power reactor. Associated effects also discussed in the noted CFR include the production of uranium hexafluoride, isotopic enrichment, fuel fabrication, reprocessing of irradiated fuel, transportation of radioactive materials and management of low-level wastes and high-level wastes related to uranium fuel cycle activities. Radiological wastes will be addressed in section 6 of the EIS.*

Comment: I'm not going to presume to tell you what's best for your community, I am going to talk in solidarity with the communities that are facing the impacts of uranium mining. Eighty percent comes from overseas. Most of those places don't even have environmental or worker protections. (1731)

Comment: The most radical nuclear people will admit that something is going to come along that's going to be cleaner and safer and better, and that eventually -- well, we're still going to be storing the waste from this 50 years or 100 years of nuclear power and have to safeguard it. What language are we going to put on the warnings to people from the nuclear waste and have any guarantee that it's going to be spoken 10,000 years from now? (1736)

Comment: Interestingly enough, nuclear reactors remove radiation from the environment. This is probably going to come as a startling little fact for you, but think about this. The isotopes that you put in the reactor are long-lived isotopes -- radioactive isotopes. Reactors convert them to short-lived radioactive isotopes that die off much more quickly. When you're through at the end of the day, there is a lower radiation load on the environment because of the presence of nuclear reactors. (1752)

Comment: In terms of going forward in the years to come, obviously we have much to do in the area of disposing of the high level nuclear waste. ... but it's not something we should delay going forward with new construction and wait 20 or 25 years till the technology is developed. We should do it in parallel. (1753)

Response: *The comment does not provide new information relevant to the environmental impact analysis and therefore will not be evaluated further.*