PMSTPCOL PEmails

From: Paul Kallan
Sent: Monday, June 02, 2008 10:55 AM
To: Stephen Williams
Subject: FW: STP Binning Report (Q4007, Task 1)
Attachments: STP Comment Detail Report.doc; COMMENT TRACKING 05-27-08.doc; STP Comment Summary Report.doc

Hi Stephen,

Here are the comments from the 2 public meetings we held in Bay City Texas.

Please review them and let me know if you have any comments.

regards,

Paul

From: Diediker, Nona H [mailto:nona.diediker@pnl.gov]
Sent: Tuesday, May 27, 2008 5:54 PM
To: Paul Kallan
Cc: Becker, James M; James Biggins; Hickey, Eva E; Keller, Tonya K
Subject: STP Binning Report (Q4007, Task 1)

I have attached a couple of different reports for your review. The "STP Comment Detail Report" contains the entire script of each comment document and shows what we identified as a comment and how it was binned (assigned to a particular subject matter). The comment is highlighted and preceded by the comment number and bin. Review this document to ensure we captured all relevant comments, for context of comments, to delete comments, and to add text to existing comments as you see fit. I am not sure if you will easily be able to do this using "track changes" or if it will be easier to print out hard copies, make changes, and send the hard copies back to me. Whatever works for you.

The "STP Comment Summary Report" presents just the comments pulled from each document. In other words, it leaves out all the text that is not a comment. Use this report to cross-check what the other report shows. I noticed a few of the changes I made did not show in the detail report but are correct in the summary report, and if we added any annotations (like for letter #20) they only show in the summary report.

I also provided the comment tracking table so you can cross-reference our comment number to a specific author. The comment numbers appear as **STP-COL3&4-SC-00001** in the reports. Looking at the last five digits, this particular comment refers to document #1, Timothy Ryan.

You are going to see some funky things in the reports due to converting PDFs into database text. Tables do not show as tables, but just a run of text, spacing may be off, weird symbols appearing instead of letters . . . Those sort of things. And we have put all the ML #s into the database even though they do not all appear in these reports. We still have a few bugs to work out with the database, but it's pretty close to complete.

A couple of notes - document #19 was transcribed from a comment form and document #20 was transcribed from the hand-written note handed to Jim Biggins in the parking lot at the meeting. I point this out because they look different from the other comment documents in the detail report.

I am going to have the team start writing responses in order to make up some time. I am assuming our delineation/binning is not too far off the mark and we will be safe in doing so.

If you need any help, just give me a call.
<<STP Comment Detail Report.doc>> <<COMMENT TRACKING 05-27-08.doc>> <<STP Comment Summary Report.doc>>

Nona H. Diediker

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Tracking:

Recipient	Read
Stephen Williams	Read: 6/2/2008 11:14 AM

Hearing Identifier: SouthTexas34Public_EX
Email Number: 626

Mail Envelope Properties (88EDD64608FA36499C5AED7AC8B78FB44DA58C4093)

Subject: FW: STP Binning Report (Q4007, Task 1)
Sent Date: 6/2/2008 10:55:01 AM
Received Date: 6/2/2008 10:55:00 AM
From: Paul Kallan

Created By: Paul.Kallan@nrc.gov

Recipients:
"Stephen Williams" <Stephen.Williams@nrc.gov>
Tracking Status:: Response: Read : 6/2/2008 11:14:00 AM

Post Office: HQCLSTR01.nrc.gov

Files	**Size**	**Date & Time**
MESSAGE	2999	6/2/2008 10:55:00 AM
STP Comment Detail Report.doc	724034	
COMMENT TRACKING 05-27-08.doc	46146	
STP Comment Summary Report.doc	347714	

Options
Priority: Standard
Return Notification: No
Reply Requested: Yes
Sensitivity: Normal
Expiration Date:
Recipients Received:

Comment Detail Binning Report

STP-COL3&4-SC-00001 (Email) [ML]

Public Comment re EIS for South Texas Project, Unit 3 and 4, COLA

Public Open House February 5, 2008, Bay City, TX

Dear Sir:

I attended the afternoon session of the public open house in Bay City, TX on February 7, 2008. Public comments were solicited, but I have been unable to find a preferred format. I hope this will suffice. I have only just now begun to collect my thoughts and I hope the following will help you to see how [#1 Opposition-Licensing Action] you are failing to carry out your charter of protecting the safety and health of US citizens.

I offer the following fable to help you understand my frustration. It is not a joke. It has a moral.

I am in a boat in the middle of the ocean. Along with me is Cap'n STP.

(That's short for South Texas Project.) It's a small boat and we are very poor. Cap'n STP comes to me one day and says "I know how to get some money".

"That's great," I say.

"We just need to punch a small hole in the bottom of the boat to get the money," he says.

"Not so great," I say, suspiciously.

"Don't worry," he says, "the Nautical Regulatory Commission (NRC), which is in charge of ensuring your health and safety is giving us a bucket to bail the dirty bilge water out of the boat and put it where it will do no harm, back in the ocean."

"OK" says I, with not quite the enthusiasm as before.

Years pass. All is good. Then one day the NRC comes and snatches away my bucket.

"The government has decided that they don't want any more of your dirty water in our nice clean ocean," the NRC says. "But don't worry it will be many years before your boat fills up."

"OK," I say, nervously, "when can I have my bucket back?"

"We're working on that," they say.

Time passes. My feet get wet.

One day Cap'n STP rushes in and says "I have a great idea!"

"Thank God," I say, "I was beginning to worry about all the water in the boat."

"We're going to double the size of the hole in the boat to get more money!" he says with a wildness in his eyes that really scares me. But after thinking about it awhile, I calm down. I know that Cap'n STP needs the permission of the NRC to do this. Surely, the fine folks at NRC, who are in charge of mitigating risk to my health and safety, will see the folly of this plan.

Imagine my horror when I hear the NRC's response to Cap'n STP. "We don't see a problem," they say.

"Well, can I at least have my bucket back?" I ask.

"We're working on that," they say, "How did your shoes get so wet? You should be more careful. It's not good for your health."

Timothy Ryan
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Bay City, TX 77414

file:///C|/Projects/NRC/South%20Texas/Fwd%20Public%20Comment%20re%20EIS%20for%20South%20Texas%20Project%20Unit%203%20and4%20COLA.txt

STP-COL3&4-SC-00002 (Email) [ML]

Mon 2/18/2008 9:15 AM

Attached are comments on the scope of the EIS for Units 3 and 4 at the South Texas Nuclear Project.

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Comments on Scoping of Environmental Impact Statement
for South Texas Nuclear Project Units 3 and 4

INTRODUCTION

The comments below are submitted on behalf of the general public, including potential intervenors in the Nuclear Regulatory Commission Combined Operating License proceeding for Units 3 and 4 of the South Texas Nuclear Project, by Lanny Sinkin, Attorney at Law.

These comments address the scope of the Environmental Impact Statement (EIS) that is going to be prepared for the two new nuclear power plants proposed at the site of the South Texas Nuclear Project.

GENERAL PRINCIPLES

The National Environmental Policy Act (NEPA) sets forth the requirements for an EIS. 41 U.S.C. Section 4321. The goal is to “use all practicable means ... [to] fulfill the responsibility of each generation as trustee of the environment for succeeding generations.” Ibid. Section 4331(a).

The EIS is required to be a detailed statement on the following:

(1) environmental impact of the proposed action,

(2) any adverse environmental effects which cannot be avoided should the proposal be implemented,

(3) alternatives to the proposed action,

(4) the relationship between local, short-term uses of the environment and the maintenance and enhancement of long term productivity, and any irreversible or irretrievable commitments of resources which would be involved in the proposed action, should it be implemented. Ibid. Section 4332(C).

Regarding environmental impacts, the EIS for STNP 3 and 4 should comprehensively address the potential environmental impacts of this project. To fulfill that obligation, the EIS should assess impacts that are direct, indirect, secondary, and cumulative.

To determine adverse impacts that cannot be avoided, the EIS should examine construction, operation, decommissioning, and waste disposal impacts.

Regarding alternatives, the EIS should directly compare alternatives to achieve the same purpose as Units 2 and 3. The EIS should certainly include the “no action” alternative and analyze how utilities would respond, if the decision were made to not continue pursuit of the project after the EIS is complete.

The required comparison between short-term use and long term viability should include intergenerational impacts.

The examination of irreversible and irretrievable commitments of resources should also look at the entire construction, operation, decommissioning, waste disposal cycle of nuclear power plants.

The proposed STNP Units 3 and 4 have a much different context in which environmental impacts are assessed than did nuclear plants thirty years ago. The state of the Earth is different and Human knowledge of anthropomorphic impacts on global climate, species extinction, and other planetary scale effects has expanded rapidly. There are also security concerns based on recent events that either did not exist thirty years ago or were not seriously considered. The EIS for STNP Units 3 and 4 must take into account these new areas of concern.

STNP Units 3 and 4 are positioned to be the first new nuclear projects presented for public examination. Part of that examination will be taking a hard look at how comprehensively and honestly the EIS is prepared.

Precisely because NEPA is reduced to merely a procedural requirement to take a hard look and does not prevent even the worst environmental destruction, the integrity and comprehensiveness of the EIS process is critical to avoiding a decision ultimately producing disaster and regret.

ISSUES

GENERAL ENVIRONMENTAL IMPACTS

1 [#1 Process-ESP-COL] 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

SITE SELECTION

[#2 Outside Scope - Safety] 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).

GLOBAL CLIMATE CHANGE

[#3 Meteorology and Air Quality] 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.

These comments suggest the following issues be included in the EIS scope as contributing to that objective examination.

[#4 Meteorology and Air Quality] 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. 1

The decommissioning of the plant

The transportation of radioactive waste, including high level, low level, and decommissioning waste to final storage

The preparation and operation of sites where the radioactive waste is to be stored.

1 [#5 Meteorology and Air Quality] 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.

2. The impact of climate change on the plant should include consideration of the following:

a. [#6 Hydrology-Surface Water] 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. 2 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

b. [#7 Outside Scope-Emergency Preparedness] 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

c. [#8 Outside Scope-Emergency Preparedness] 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?

d. [#9 Outside Scope-Safety] 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.

e. [#10 Outside Scope-Safety] The potential exists for more frequent and more powerful tornadoes. That potential should be examined in the EIS.

f. [#11 Hydrology - Surface Water] 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?

g. [#12 Outside Scope - Miscellaneous] 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.

WATER

The South Texas Nuclear Project has a contract with the Lower Colorado River Authority (LCRA) that guarantees delivery of sufficient water for four nuclear reactors at the STNP site, either directly from the Colorado River or from highland lakes in times when the river flow is insufficient. That guarantee is operable under normal and drought conditions.

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.

That guarantee, however, is based on the worst historical drought (1946-1957). If conditions arise that are worse than that historical drought, all users supplied by LCRA will be reduced proportionally.

The climate change study prepared for LCRA recommended a planning assumption that the impact of global warming on South Texas would be a reduction of precipitation by 5 to 20% and more frequent droughts. A Framework for Assessing Impacts of Climate Change, Lower Colorado River Authority and San Antonio Water System, July 2007. **[#13 : Hydrology-Surface Water]** 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.

[#14 Outside Scope - Misc] 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.

[#15 Outside Scope - Misc] 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.

[#16 Hydrology-Surface Water] 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.

[#17 Accidents-Severe] 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.

[#18 Health-Radiological] 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.

MATERIALS SHORTAGE

[#19 Outside Scope-Safety] 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.

HUMAN HEALTH

[#20 Health-Radiological] 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 rates. Source: Joseph J. Mangano, “Improvements in local infant health after nuclear power reactor closing,” Environmental Epidemiology and Toxicology (2000) 2, 32-36

ENVIRONMENTAL HEALTH

[#21 Health-Radiological] 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.

RADIOACTIVE WASTE

One environmental effect of nuclear power plants that cannot be avoided is the production of radioactive waste. Generally, such waste is categorized as high level or low level.

The production of high level waste dangerous to every generation coming after ours is an intergenerational crime of the highest magnitude. That this crime is committed in order to supposedly provide those living today cheaper electricity, much of which is spent on entertainment and frivolous pursuits only compounds the seriousness of the crime.

Those pushing for continuation of this criminal activity justify their position by claiming that Humans will solve the radioactive waste problem. That claim to be able to solve a problem that stretches up to 250 thousand years into the future is dubious at best and arrogantly dangerous at worst.

[#22 Uranium Fuel Cycle] 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. The analysis should acknowledge the loss of support for the Yucca Mountain long-term disposal facility (For example, in the last presidential debate that included Barak Obama, Hillary Clinton, and John Edwards, all three stated that Yucca Mountain was not a suitable facility for long term storage of highly radioactive waste.)

[#22 Uranium Fuel Cycle]

[#23 Outside Scope-Security and terrorism] 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.

[#24 Uranium Fuel Cycle] The low level waste analysis should examine the likelihood of off-site storage being available for such waste.

[#25 Benefit-Cost Balance] 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.

[#26 Decommissioning] 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.

[#27 Uranium Fuel Cycle] Waste produced from uranium mining, including tailings, is another waste which should be included in the analysis.

ALTERNATIVES

[#28 Opposition-Nuclear Power] 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?

[#29 Alternatives-Energy] 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.

[#30 Alternatives-Energy] One of the applicants, CPSEnergy, has reclassified energy conservation as power generation. This essentially treats energy conservation approaches the same as baseload.

[#31 Alternatives-Energy] 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?

[#32 Benefit-Cost Balance] 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.

[#33 Alternatives-Energy] 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.

2. [#34 Alternatives-Energy] 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.

[#35 Outside Scope-Security and terrorism] 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.

IRREVERSIBLE AND IRRETRIEVABLE COMMITMENT OF RESOURCES

[#36 Alternatives-Energy] 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.

Regulatory Mitigation

[#37 Outside Scope-NRC Oversight] 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 already has a massive public record and will be one of the most complex administrative proceedings ever held, if the proceeding goes forward.

[#38 Outside Scope-NRC Oversight] 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.

Submitted by:

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STP-COL3&4-SC-00003 (Email) [ML]

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February 18, 2007

Dear Nuclear Regulatory Commission,

These comments are being submitted by the Lone Star Chapter of the Sierra Club as part of the EIS scoping process for the Combined Operating License of South Texas Project Units 3 & 4 in response to Dockets Nos. 52-012 and 52-013 as published in the Federal Register on December 21, 2007. Under both the National Environmental Protection Act and the Nuclear Regulatory Commission's regulations found in 10 CFR part 51, organizations and members of the public who request or have requested an opportunity to participate in the scoping process or any person who intends to petition for leave to intervene should participate in the scoping process. While the Sierra Club has not made a final decision on whether we will petition for leave to intervene on the proposed COL of STP No. 3 and 4, by our presence at the public scoping meeting on February 5th, as well as our joint filing with other organizations a petition to suspend the deadline for intervention - a filing which was acted upon by the NRC indefinitely suspending the application - the Sierra Club has indicated its interest in the STP application process as well as the EIS scoping process as well as its likely plans to petition to intervene**. [#1 Process-ESP/COL]** 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.

The Lone Star Chapter of the Sierra Club is the Texas state chapter of a national environmental organization with a long-standing interest in the nuclear power industry. With the motto “to preserve, enjoy and protect the planet,” the decisions made today about energy investments in Texas will guide the future of the state and indeed the planet. Nationally, the Sierra Club has adopted a Smart Energy Policy which calls for obtaining power from a combination of alternative energy sources such as wind, geothermal and solar, energy efficiency and demand management, and specifically advocates a transition away from power produced by coal plants and nuclear plants.

During recent legislative sessions in Texas, the Lone Star Chapter of Sierra Club has actively supported legislation on increased programs to obtain power through energy efficiency and renewable energy sources. In addition, the Lone Star Chapter has been active in water policy and the need to promote those energy sources which do not rely on major volumes of water - such as that needed by the South Texas Project == in part to protect flows to the bays and estuaries.

While all 24,000 Lone Star Sierra Club members have some interest in how Texas will meet its energy demand, we do have significant membership in cities such as San Antonio which has announced their intention to obtain power from the STP No. 3 and 4 - if built - as well as Austin, which has recently announced it will not join the STP 3 and 4 application process, but is a present investor in STP No. 1 and 2, and may still contract for nuclear power if the plants are built. Finally, in Matagorda County, where the plant is being proposed, as well as the neighboring counties of Jackson, Wharton, For Bend and Brazoria, Sierra Club presently has nearly 550 members. Several of these individuals did come to the Bay City Public Scoping Meeting on February 5th in Bay City.

As a potential intervener, as a membership organization with thousands of members in Austin and San Antonio who have a direct stake in the COL application, as well as hundreds of individual members living within 50 miles of the proposed two new units, the Lone Star Chapter of the Sierra Club has an interest in an EIS process that considers the myriad of issues involved in the potential licensing of STP Units 3 and 4.

Importance of the EIS process

Until the recent decision by NRC to indefinitely suspend the hearing process for STP Nos. 3 and 4, the application was the first to be published in the Federal Register (on December 27, 2007), and is thus the first new nuclear plant to seek a license in nearly 30 years. Now operating under the streamlined Combined Operating License application process - which severely curtails the ability of potential interveners to participate effectively - the proposed plants could thus be the first new nuclear plants built in several decades. As such, the scoping process and subsequent EIS are vitally important.

[#2 : Alternatives-Energy] It must be remembered that the recent renewed interest in nuclear power in the United States - as evidenced by the multiple applications received by NRC - is being driven in no small part by federal loan guarantees, a promised production tax credit, the renewal of the Price Anderson Act, and other direct and indirect federal subsidies that make nuclear power more economical. As such, with such a large federal investment in nuclear power, each 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. There is much at stake in the decisions over the STP COL application, including potentially billions in taxpayer monies. To do anything less than a full and robust EIS would therefore be shameful.

Specific Comments

[#3 : Opposition-Licensing Process] The Lone Star Chapter of the Sierra Club bases most of our comments on the Environment Report submitted by the applicant in accordance with 10 CFR 51.45 and 10 CFR 51.50, but also on different parts of the application itself. We 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. Rather than point out each deficiency page by page, to make the comments useful, we have organized our comments by issue area. Thus, the following comments are submitted and follow the sections of the application itself.

Failure to Provide Financial Information needed for True Alternative Analysis

[#4 Benefit-Cost Balance] First of all, we would note that 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, the following tables have been declared proprietary and thus unavailable to the public for review:

Table 1.3-1 Summary of Project Costs for STP Unit 3

Table 1.3-2 Summary of Project Costs for STP Unit 4

Table 1.3-3 Summary of Construction Funds for STP Unit 3

Table 1.3-4 Summary of Construction Funds for STP Unit 4

Table 1.3-5 Combined Funding Sources for STP 3 & 4

Table 1.3-6 STP Unit 3 Operations and Maintenance Costs for the First Five Years

Table 1.3-7 STP Unit 4 Operations and Maintenance Costs for the First Five Years

Table 1.3-8 STP Unit 3 Plant Performance

Table 1.3-9 STP Unit 4 Plant Performance

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. This is particularly important as this is a joint application with CPS Energy, which serves the City of San Antonio with retail electric power. [#5 Outside Scope - Miscellaneous] 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. [#6 Benefit-Cost Balance] 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. [#7 Benefit-Cost Balance] 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.

The Need for Power and How you Get there

[#8 Benefit-Cost Balance] 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. **[#9 Need for Power]** 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. Thus, the legislature approved HB 3693, which will strongly encourage investor-owned utilities to double the amount of energy from market-based and standard-offer energy efficiency programs from 10 percent to 20 percent of growth, while also encouraging demand response pilot and required programs. In addition, the legislature requires that political subdivisions, coop and municipal utilities come up with their own plans to reduce energy demand, which could change the ERCOT projections significantly. Finally, HB 3693 requires a series of studies on how to increase the amount of energy efficiency in the state, as well as how to increase the use of Combined Heat and Power. With no fewer then four separate legislative committees meeting this year over the interim on how to meet Texas's energy demand - including through energy efficiency and renewable resources - it is quite likely that the future of peak and load demand will look quite differently then that presented by the applicant.

The EIS must at a minimum assess this “need for power” with an independent analysis.

[#10 Need for Power] 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.

Among the studies that should be assessed as part of a truly independent evaluation would be: 1) the American Council for an Energy-Efficient Economy's September 2007 study “Role of Energy Efficiency and Onsite Renewables in Meeting Energy and Environmental Needs in the Dallas-Ft. Worth and Houston-Galveston Metro Areas (Report No, E078); 2) the ACEEE's Report No. E073 “Potential for Energy Efficiency, Demand Response and Onsite Renewable Energy to Meet Texas's Growing Electricity Needs (March 2007); the Optimal Energy study, “Power to Save: An Alternative Path to Meet Electric Needs in Texas” (NRDC, January 2007); and 4) Kema, “City Public Service Technical and Economic Energy Efficiency Potential Study” (October 18, 2004). [#11 Alternatives-Energy] In particular, because CSP 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.

[**#12 Benefit-Cost Balance]** In addition, because 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.

Thus, **[#13 Need for Power**] NRG and CSP 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.

[#14 Need for Power] Sierra Club believes that an EIS must more independently assess these claims, 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. As an example, since the ER was released, proposed power plants in Goliad County (coal) and Navarro (Natural Gas) have emerged. In addition, the development at the PUC of rules for the creation of new transmission capacity through so-called CREZ zones increase the likelihood that power generation from wind and solar from West Texas will actually be available to customers in Austin, San Antonio and Houston, which purchase the majority of the power produced by STP No. 1 and 2, and would presumable do the same for No. 3 and 4. Thus, the "need" for STP 3 and 4 rests on many assumptions which must be critically examined.

Look at Full Range of Alternatives

[#15 Alternatives-Energy] Similarly, an 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. As already mentioned, the 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.

[#16 Alternatives-Energy] 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.

[#17 Need for Power] Instead, the analysis provided by the ER Chapter 9 provides little details. For example, it 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.

[#18 Alternatives-Energy] 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.

[#19 Alternatives-Energy] 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.

[#20 Alternatives-Sites] The analysis of choosing an alternative site - such as NRG's land owned in Limestone County - concludes that the existing Matagorda County 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.

[#21 Outside Scope - Miscellaneous] In addition, the analysis of the Matagorda 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. 2 and 4? Could a problem at the new plant lead to a shut down or problem with the existing plants? **[#22 Outside Scope-Safety]** 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?

In short, an EIS must much more robustly examine the need for power, and the alternative to the STP power - which is limited in the ER to comparing it to coal and to gas - as well as the site selection process.

Failure to Consider All Cumulative Impacts

[#23 Uranium Fuel Cycle] Chapter 10 of the Environmental Report fails to identify all cumulative impacts that can be expected from the investment, construction and operation of two new nuclear plants. Most importantly, it 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. Like the nuclear industry has been doing for 50 years, Chapter 10 again fails to acknowledge that nuclear power produces dangerous and in some ways permanent -lasting 10s of thousands of years - radioactive waste that has never been successfully isolated from humans and their environment. This is a cumulative impact that must be addressed.

[#24 Outside Scope - Miscellaneous] In addition, the 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.

Water Use, Climate and Global Warming

[#25 Hydrology-Surface Water] 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.

First of all, Sierra Club agrees that the applicant has secured rights to use water through an agreement with the Lower Colorado River Authority as well as access to groundwater which assures water availability for the plant in the near term under most situations. Thus, the settlement agreement between LCRA and STPNOC of 2006, and its related "Amended and Restated Partial Assignment and Transfer of Water Permit" and "Amended and Restated Contract" assure the South Texas Project of the right to up to 102,000 acre-feet of river flow if flows are sufficient, and also up to an additional 40,000 acre-feet if the levels of the cooling reservoir dips below 35 feet. Data provided by STP indicate that the applicant has only been using about 37,000 acre-feet per year to fill the cooling reservoir, and conservatively even when operating No. 3 and 4, only 75,000 acre-feet approximately would be used. However, there are several situations which warrant additional assessments.

[#26 Hydrology-Surface Water] First of all, the LCRA still has an ongoing assessment of the flow needs of Matagorda Bay. The 2006 Inflow Needs Study has been regarded as perhaps the most comprehensive bay study performed in Texas. Still, state agencies such as the Texas Parks and Wildlife only recently have submitted comments on the Draft Flow Report that suggest that the inflow needs for certain species may be greater than anticipated. 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.

[#27 Outside Scope - Miscellaneous] In addition, any 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.

[#28 Hydrology-Surface Water] 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.

[#29 Hydrology-Surface Water] 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.

[#30 Ecology-Aquatic] 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. **[#31 Ecology-Aquatic]** 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.

[#32 Meteorology and Air Quality] 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.

[#33 Outside Scope - Safety] 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.

[#34 Ecology-Aquatic] 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. As already mentioned, the assessment of ecology in the area is heavily dependent upon information from the first application in the 1970s and because of the change in sediment and salinity must be updated and also assessed for the impacts of climate change.

Radioactive Waste: A Fantasy?

[#35 Uranium Fuel Cycle] 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. Thus, in terms of low-level waste, the ER will generate about 950 cubic meters of waste per year and that that waste will be shipped to commercial low-level waste disposal facilities that are "sited and operated consistent with 10 CFR 61. (ER 5.5.3)." Any impact of these well-run, properly operated facilities would be SMALL suggests the report.

The siting of low-level waste disposal facilities has been controversial and difficult for years. While at one times there were six facilities operating in the U.S. that had authorization to take low-level waste, three of them shut down years ago. All three of these facilities had well-documented problems, in large part because the assurances that the waste would not leak outside the boundary for perhaps thousands of years were, well, false, and instead within a few years, high levels of tritium and other substances were being found in the waters (see for example, Donald Bartlett and James Steele's Forevermore: Nuclear Waste in America, 1985).

[#36 Uranium Fuel Cycle] 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 ER 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.

For example, while the private company WCS has an application to take low-level radioactive waste, that application has yet to be acted upon by the Texas Commission on Environmental Quality, and the EIS should address certain scenarios, including both the likely impacts of transporting wastes across Texas highways to WCS, or alternative locations, or near permanent storage on-site.

[#37 Uranium Fuel Cycle] 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.

Fifty years after the first nuclear power plants opened, the government and nuclear industry has failed to locate, study and license a radioactive waste depository. The agreements between the government and nuclear industry to take the “spent” fuel rods continue to allow the lie that there is a solution to radioactive waste. Yet even if that agreement were honored, there is no agreement on taking waste from new nuclear plants, meaning resolution of that issue is decades away at the least.

[#38 Outside Scope-Safety] 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. [#39 Outside Scope-Safety] 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. [#40 Outside Scope-Safety] In additional, considerable 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.

Thus, an EIS must consider and address the long-term storage of both low-level and high-level waste on-site, and not assume the fantasy that commercial and government-sanctioned depositories will be available.

The Whole Uranium Cycle

In Section 5.7, the applicant attempts to assess the impacts of the whole uranium cycle on the environment. As already indicated, Sierra Club finds the discussion hear and in other parts of the ER to be lacking in terms of the likely scenario for dealing with the waste issue. In addition, the uranium cycle discussion fails to mention the global warming impacts of the uranium cycle. [#41 Meteorology and Air Quality] 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.

[#42 Uranium Fuel Cycle] In addition, there 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.

[#43 Uranium Fuel Cycle] 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.

Terrorism and its Impacts

It is surprising that after 9/11 proved the U.S. is vulnerable to terrorist attacks that an ER would ignore the issue of security and potential terrorist attacks. The NRC is supposedly finalizing rules on consideration of aircraft impacts for new nuclear power reactor designs, under 10 CFR Part 52. Nonetheless, under the most likely proposed rule, the STP No 3 and 4 would not have to submit an analysis on whether an airplane might impact their proposed plant because it is using a pre-certified design, the ABWR. [#44 Outside Scope-Security and terrorism] Sierra Club has already submitted comments indicating our serious concerns with this 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.

Health Effects

For 50 years, there has been denial of the real impact of radioactive gases and wastes on public health. Ranchers near radioactive waste fall-out sites were lied to about the impacts on their sheep, Hanford workers were lied to about the deaths of workers at the disposal facility. [#45 Accidents - Severe] 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. [#46 Health-Radiological] 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.

The Lone Star Chapter of the Sierra Club appreciates the opportunity to comment on the Environmental Report and to be part of the EIS scoping process.

Sincerely,
Cyrus Reed, PhD
Conservation Director
Lone Star Chapter, Sierra Club
Cyrus.reed@sierraclub.org

STP-COL3&4-SC-00004 (Email) [ML]

Supplement to Scoping Comments on EIS for South Texas Nuclear Project Units 3 and 4. Ref: Federal Register/Vol. 72, No. 245/Friday, December 21, 2007.

The following additional comments are submitted on behalf of the general public and potential intervenors by Lanny Sinkin, Attorney at Law.

In case those preparing the EIS for the South Texas Nuclear Project Units 3 and 4 lack adequate access to creative information regarding alternative strategies for meeting our energy needs, there are many useful suggestions available at www.apolloalliance.org

[#1 Alternatives-Energy] 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.

[#2 Uranium Fuel Cycle] 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.

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STP-COL3&4-SC-00005 (Email) [ML]

From: Cameron Payne at ATT.net [campayne@att.net]
Sent: Monday, February 18, 2008 8:59 PM
To: STP_COL@nrc.gov
Subject: Comments on scoping of the EIS for STP units 3 and 4

Importance: High

February 18, 2008

Re:STP reactors #3 and #4 Environmental Impact Statement

Dear NRC:

At the meeting held by the NRC in Bay City, TX on February 5, 2008, I was called to speak by Mr. F. Cameron to address the assembly. I did so briefly, addressing mainly my concerns:

1. [#1 Outside Scope-Safety] 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.

2. [#2 Outside Scope-Safety] 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. Reactor control and fuel rods were stuck in both units #6 and # 7, both ABWR reactors. Fortunately, these two reactors were located where they were and not where reactors 1, 2, 3 and 4 were located, an area that received even greater seismic acceleration. In Unit 7, the boiler for maintaining the vacuum in the condenser stopped because of the earthquake. Cooling had to be maintained using the main steam safety release valve.

Manual operation was necessary because of the continuing aftershocks, so it must have been a fairly hair-raising experience for the operators. Radioactive water from the spent fuel pool of Unit 6 leaked to the sea. Iodine leaked from the exhaust stack of Unit 7 along with chromium 51 and cobalt 60. Piping from the fire protection system ruptured. An in-house transformer caught on fire and burned for two hours (unit 3). Damage to the ceiling crane on the operating floor of the reactor building (Unit 6).

These facts hardly lend confidence to the ABWR design proposed by STP.

In addition, I hereby submit two other issues for consideration under the EIS:

3. [#3 Accidents-Severe] 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.

I live near the center of Houston, Texas which is about 70 miles from the existing two STP nuclear reactors, and the proposed site for two new ABWR reactors. Houston has a population of more than two million people, the fourth largest city in the U.S. The Houston-Sugar Land-Baytown metropolitan area is the sixth largest in the U.S. with more than 5.6 million people. In 1986, Kiev, the capital of Ukraine, also had a population about as big as Houston. Kiev is also about 70 miles from a collection of nuclear reactors located in the small city of Chernobyl. In April 1986, due primarily to human error, Chernobyl suffered from a catastrophic meltdown culminating in a massive explosion that ejected 50 tons of highly radioactive material up into the sky and another 70 tonnes outward, as compared to the 4.5 tons of highly radioactive materials contained in the first atomic bomb dropped on a city. In addition to the catastrophe which unfolded in and around Chernobyl, a city which no longer exists, and in spite of prevailing winds moving away from Kiev, the radiation levels in Kiev during the first three days after the explosion were as high as 100 milliroentgens per hour. By day 13, Kiev was experiencing 0.34 milliroentgens per hour according to official reports which were believed to be grossly understated. This is 8.6 milliroentgens per 24 hours, six times higher than the WHO norm According to one source, at ground level the daily dose in Kiev was 300 times the WHO norm.

[#4 : Accidents-Severe] 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.

[#5 : Accidents-Severe] 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. 4. [#6 Ecology-Aquatic] Lastly, 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.

Sincerely,
Francis C. Payne
1919 A Harold St.
Houston, TX 77098
campayne@att.net

STP-COL3&4-SC-00006 (Email) [ML]

>>> "Matthew Johnson" 2/19/2008 1:41 PM >>>

Dear Mr. Kallan and Ms. Guerrero,

I am writing to express our disappointment at the inability of the NRC to accept comments on the Environmental Impacts of the South Texas Project Combined Construction and Operating License Application. Public Citizen sent comments on time yesterday, Feb 18, 2008, before the 5 PM deadline but the emailed comments sent to STP_COL@nrc.gov were returned as undeliverable due to an undisclosed size limit.

Our comments included attachments of reports that call into question the need for more electric capacity in Texas. This information is directly relevant to the comments filed on behalf of Public Citizen, and the re-scoping of the environmental impact of STP units 3 & 4.

[#1 Outside Scope: Miscellaneous] 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.

Sincerely,

Matthew Johnson
Matthew Johnson
Public Citizen-Texas Office
1002 West Ave, #300
Austin, TX 78703
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Email: mjohnson@citizen.org

STP-COL3&4-SC-00007 (Meeting Transcript) [ML080950499]

Official Transcript of Proceedings
NUCLEAR REGULATORY COMMISSION
Title: SOUTH TEXAS PROJECT UNITS 3 & 4
Public Meeting: Afternoon Session
Docket Number: 52-012 and 52-013
Location: Bay City, Texas
Date: Tuesday, February 5, 2008
Work Order No.: NRC-1998 Pages 1-152
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
+ + + + +
PUBLIC SCOPING MEETING
SOUTH TEXAS PROJECT UNITS 3 & 4
COMBINED LICENSE APPLICATION
+ + + + +
Tuesday, February 5, 2008
+ + + + +
Auditorium
Bay City Civic Center
201 7th Street
Bay City, Texas
1:30 p.m.
PANEL MEMBERS:
FRANCIS X. "CHIP" CAMERON, Facilitator
JIM BIGGINS, Office of General Counsel
NILESH CHOKSHI, Deputy Director, NRC
GEORGE WUNDER, Sr. Project Manager
PAUL KALLAN, Environmental Project Manager
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P R O C E E D I N G S

MR. CAMERON: Thank you. My name is Chip Cameron. I work for the Nuclear Regulatory Commission, the NRC. And I just wanted to welcome all of you to the meeting today.

And the topic of today's meeting is the NRC's environmental review process for evaluating a license application, such as the one that we received from the South Texas Project Nuclear Operating Company to construct and operate two new reactors at the South Texas Project Site.

And it's my pleasure to serve as your facilitator for today's meeting, and in that role I'll try to help all of you have a productive meeting today.

Before we get into the substance of today's discussions, I just wanted to say a few words about the meeting process so that you understand what's going to happen here this afternoon. And I'd like to talk about the format for the meeting, some simple ground rules to follow, and the agenda for the meeting.

In terms of the format for the meeting, it's basically a two--part format. The first part of it is for the NRC to give you some brief presentations, some information on what our review process is for this type of license application.

And we'll then go on to you. We'll have some time for questions. We have a lot of people signed up to speak, and that's an important part of the meeting, but I think we'll still have time for a few questions after the NRC speakers get done. And I would ask you to hold any questions for them until they go through all of their presentations.

Now the second part of the meeting is an opportunity for the NRC staff to listen to your advice and recommendations. And I will ask you during that part of the meeting, those of you who have signed up, to come up to the podium to speak.

Now you're going to hear more about this from the NRC staff, but this is called a scoping meeting. And simply put, the NRC is seeking advice today on what the scope of the environmental impact statement should be that they're going to prepare.

But we realize that there may be broader concerns than environmental issues, and we always want to listen to those concerns, even though they may not fall within the scope of the environmental review that we're going to be doing.

Now during this second part of the meeting, we're here to listen. We're going to be listening to you. We're not going to be responding, except in those rare instances where there may be some new information that the NRC has on a particular subject that we'll want to let you know about.

In terms of ground rules, if you have questions after the NRC presentations, just raise your hand and I'll bring you this cordless mike, and if you could please introduce yourself to us, ask your question, and then we'll go to the NRC staff for answers.

And I would just ask you, during the question part of the meeting to focus on questions. Sometimes questions have a tendency to warp into comments. If you have a comment, then give it during the comment period. And if you haven't signed up yet, just let me know and I'll put you on the list.

I would ask that only one person speak at a time for two very important reasons. One, so that we can get what I call a clean transcript so that we know who is speaking. We are

transcribing the meeting tonight, and we have Leslie Berridge who is our stenographer today. And all of that will be captured, and that transcript will be available to anybody who wants to see it. But more importantly, let's give our full attention to whoever has the floor at the moment. I would ask you to try to be concise in your questions so that we can give everybody who wants to talk an opportunity to participate today. And during the formal comment period, I'm going to ask you to try to hold your comments to three to five minutes to make sure that we can finish up on time, and we do have another meeting tonight at 7:00 p.m.

I think that three to five minutes is enough time to summarize what you have to say. It also alerts the NRC staff to issues that we should start working on immediately. And as the NRC staff is going to tell you, there is an opportunity to submit written comments on these issues so that if you have to amplify on what you said today, you can do it in your written comment.

Finally, I would just ask you to extend courtesy to all. You may hear opinions today that you don't -- just don't agree with, and so I would just ask you to respect the person who's giving the particular comment. And I hear those cell phone chimes.

Let me introduce the NRC speakers. First of all, we're going to go to Nilesh Chokshi -- and you can correct me on the pronunciation of your name -- but Nilesh is the top NRC manager here today.

He's from the Office of New Reactors, and he's Deputy Director of the Division of Environmental Review, I believe. And he's going to tell you about the NRC and our purpose here today in doing scoping. After Nilesh we're going to go to Mr. Paul -- no, we're going to go to Mr. George Wunder, who is the Project Manager for the Review of the safety aspects of the application, and he's going to tell you about what the NRC does in safety review.

And finally we're going to go to Mr. Paul Kallan, who is going to address the instant subject of this meeting, which is the environment review and scoping, and Paul is the Project Manager for the review of the environment aspects of the South Texas application for the new plant.

And with that, let me just thank you all for being here. And I just want to emphasize one thing, which is continuity. This meeting is just one point on the way of perhaps a long process. I believe the NRC staff is going to give you their contact information. If you have questions or concerns, please call us, get in touch with us so that we can stay in touch over the life of this particular project.

And with that I'm going to ask Nilesh to come up.

MR. CHOKSHI: Thank you, Chip.

Good afternoon.

MALE VOICE: I don't think your microphone is on.

MR. CHOKSHI: It's not on?

(Pause.)

MR. CHOKSHI: All right. Let me start again. Thank you, Chip.

Good afternoon. My name is Nilesh Chokshi -- and you pronounced correctly. I'm the Deputy Director in the Division of Site Environmental Review in the NRC's Office of New Reactors.

Let me begin by welcoming you and thanking all of you for taking time to really help us fulfill our important responsibilities regarding the environmental reviews under the National Environmental Policy Act. NRC has specific responsibilities under this Act.

We realize that you are taking time out of your personal schedule to meet with us and share your views with us about the South Texas Project. I hope that during the open house some of you had a chance to meet with a number of NRC staff members here who have a better understanding of why we are here.

But that's what I want to talk about, and then we'll -- the purpose of this meetings. We're going to be presenting information today on the application of two new reactors to be constructed and operated at the South Texas Project Site. But we're going to particularly focus on the environmental review aspects of the application.

And it is my staff who is responsible for managing the environmental review. And several members of our environmental review team are here, and so I think that it will be very good to get feedback on that to include in that process.

We have to conduct an environmental review before we can make any decision -- and issue an environmental impact statement before we can make decision regarding the application.

Of course, in the course of our environmental review, we work very closely with our safety counterparts in our Division of New Reactor Licensing, which they manage the overall review, as well as the overall schedule for the NRC. It's quite an interactive process.

Now let me go to the next slide -- let's talk about the purpose and expand on this. I think many of you are familiar with the proposal, application which is in front of the NRC. I also want to put this meeting in context of the meeting we had last June, our public outreach meeting which took place before the application came to us.

In that meeting we wanted to share the steps involved in the licensing process. In that meeting we informed you about the opportunities that you will have to observe and participate in the work of NRC if we were to receive an application to construct and operate nuclear reactors.

During that meeting we identified several major tracks of review, which include the safety review, inspection activities, formal hearings, as well as the environmental reviews. So there are several major areas of review.

In June I think we really also wanted to explain what is the combined construction permit and operating license. So you will hear the words, often COL, combined operating license, and during this discussion people will say COL or COLA, that's all combined operating license application.

And at the outreach meeting we also I think stressed, and I think you're going to hear this during the entire meeting, -- in all of our NRC presentations, the importance of your participation in this process, because, you know, ultimately this is your home, your community, and if the proposed project comes to fruition out of all of the applications and number of agencies involved grant approvals, you will be impacted more than anybody else, living close to the plant.

And now, I think, as you know, that since that outreach meeting last June, we did receive an application to construct and operate two -- two nuclear plants at South Texas in September 2007. And, after completing our acceptance review process, now that application has been docketed, and now we are in the very initial stages of beginning the review of the application.

We are in the very early stages, and much of our focus is now focused on information gathering. We're getting ourselves ready for the review. And that's why this meeting is particularly important.

So what you're going -- as you see in this chart, in the first three bullets -- basically we're going to repeat ourselves somewhat and tell you, again, about some of the licensing process, so to put in proper context.

But what I want to really stress, the purpose, and put into context, is the fourth bullet. That's why we are here. And Mr. Cameron mentioned, this is scoping process for the environmental review.

So the primary purpose is to give you an opportunity to share with us your thoughts, your comments on what you think we should consider in the environmental review when we develop the NRC's environmental impact statement on the South Texas Project.

As I said, this is a scoping meeting. It's a part of the formal scoping process. And the scoping process is to help us understand what matters and what we need to consider. Many of you live close to the proposed plants, and have a useful or better understanding of your local environment. We need to better appreciate those environmental values and insights that you have. And today we really want to hear about those issues.

During the presentation you will hear that we -- already have a very well structured environmental review process, and our review will start with nationally and internationally recognized experts in all of the environmental disciplines.

In fact, in the audience there are members from NRC's experts in environmental, as also from the Pacific Northwest National Lab, and they're all ears. So I hope that they get to hear some of your concerns.

Now I want to make sure that you understand that this is not the last opportunity to interact with us on this matter. There will be other opportunities as we conduct our

review and as we further progress toward preparing our environmental impact statement, and you will hear about those opportunities in the later part of the presentation.

Now, before I hand this over -- meeting to the two project managers, I think it will be worthwhile to talk about -- a little bit about who we are, what we do, and whom we interact with. I know you -- probably many of you were at the June meeting and you heard, but I think it's very, very important to go over that again.

The Nuclear Regulatory Commission was created in 1974 to regulate, among other things, the civilian use of nuclear power to ensure the health and safety of the public, to promote the common defense and security, and to protect the environment.

I would like to emphasize that we are not part of the Department of Energy, or any other agency. We are an independent agency, and we are not here to promote nuclear power. We are an independent regulatory agency headed by five commissioners, all appointed by the President and confirmed by the Senate.

Unlike cabinet secretaries and other political appointees, the NRC commissioners do not change when a new president is elected. We have a tremendous continuity in that regard.

The commissioners serve five year terms, and there is always a mix of both Republicans and Democrats. And then the Commission is supported by a staff of technical and regulatory experts, something in the order of 3,000.

And as an agency -- after becoming a nuclear regulatory commission-- breaking off from the Atomic Energy Commission, we have over 30 years of experience in regulatory and licensing nuclear power plants and other uses of nuclear material.

In -- let me -- a few talks on the -- our process of licensing, of the construction and operation of a nuclear power plant. One of the, I think, major emphasis for us is to the -- that the process be open to the public to the greatest extent possible. I think that's -- and I think this -- from the highest level of the agency, you hear this thing repeatedly.

The process is also designed so that the people who have a stake in the proposed action are given a chance to participate and to be heard.

On this line, I have listed the parties participating in the licensing process into three categories. I only mentioned the commissioners and the staff, but if you look under the heading of NRC, you will also notice that I also have listed hearing boards and the Advisory Committee on Reactor Safeguards. These are, again, the opportunities for participation, as well as independent reviews.

Other parties involved in the process is, of course, the company that wants to build the plant. And the final group of participants in the process is that group of people we call stakeholders, which is comprised of people with all different interests, and that includes you, the residents and business operators of the community.

Also included under this group are various public interest groups, as well as the state government, local, and your own county and city governments. I think at a later part of the presentation you will see in the environmental review how many agencies and parties we interact with regularly.

So I think with this sort of a background, and with my efforts to set the stage for this meeting, I want to thank you again for allowing us to come into your community and for you taking this effort to meet with us and share your views.

We have a long way to go before the NRC completes its review of the application, and is ready to make a decision on the proposal. So this will be an ongoing interaction, and I think it will be important that we continue to interact with you.

Let me now introduce you to, Mr. George Wunder. He is the NRC Safety Project Manager for the South Texas Project, and he will provide more detail on the application and all aspects of review. And then we'll go to the -- really the heart of the meeting, the environmental review, which will be presented by Mr. Paul Kallan. He's our Environmental Project Review Manager.

And then we'll open the floor to you. And I think we are here to listen. Thank you.

(Applause.)

MR. WUNDER: Thank you, Nilesh.

I'm George Wunder. I'm the -- oh, thank you all for coming -- I'm George Wunder and I am the safety Project Manager for the Office of New Reactors. I've just got a few slides I'd like to go through by way of background. And I promise to be mercifully short.

So what is a combined license, and what do they want, why do they want one? Well, a combined license is essentially permission from the NRC to build and operate a reactor plant with a specific design at a specific location, subject to applicable codes and standards. In the case of South Texas, the application is for two General Electric advanced boiling water reactors to be built at their facility in Wadsworth.

As far as who can get a combined license, it has to be an entity that is qualified both technically and financially. In this case, South Texas Project Nuclear Operating Company. And as far as when the application came in, at the end of September, and we officially docketed and accepted it at the end of November of last year.

NRC has a pretty big job to do when it comes to reviewing a combined license application. Nilesh mentioned earlier that our primary focus is on safety, and one of the ways that we ensure safety is by making sure that the things that are being -- that everything is being done in accordance with the appropriate laws and regulations.

In this case the law is the Atomic Energy Act, and the regulations are those contained in Title 10 of the Code of Federal Regulations. So these are the standards which we will evaluate the -- by which we will evaluate the application that South Texas has submitted. We're also tasked with performing an environmental review under the National Environmental Policy Act, and Paul Kallan will say more about that in a bit.

Throughout our review, our effort is always to make the best and most informed decision as we can at all times, and to document these in as clear and unambiguous way as possible. And this goes toward meeting our goal of ensuring that the entire process is as open as possible, and that anyone, any citizen who is interested can understand not only what decisions we have made, but why we are making them.

Okay. Let's talk briefly here about the scope of our review, what are the things that we're going to be looking at. First we're going to look at the design of the plant, and actually a lot of this work has already been done, it was done 10 years ago. The advanced boiling water reactor is what's called a certified design, and that is our staff has already reviewed it and written a safety evaluation on the basic plant.

There's going to be some differences between the design that we certified 10 years ago, and the plant that South Texas is eventually going to build, and these differences can be the result of various things, such as improvements in technology.

For example, South Texas may want to use equipment that wasn't available when we did our certification. Or they can be due to certain unique individual needs of South Texas. Any deviations from the certified design will be reviewed and approved by the NRC staff.

We're also going to look at the suitability of the site itself. This includes things like determining the suitability of the soil to support the structures that will be built there; taking a look at the seismic history of the area; taking a look at the potentials for things like flooding, or tornados and hurricanes. All of these things are taken into account in our chapter on site characteristics.

We're going to look at the environmental impact of the project, and Paul's going to tell you more about that in a minute. We're going to look at things like the way they want to build the plant, the way they want to put it together, what kind of materials they want to use, and how the components are going to be arranged. We have standards on quality assurance, and we're going to review and inspect to ensure that those are upheld.

There's going to be an army of construction workers descending, and so obviously we're going to have to think about things like physical security, both for the new plants and for the plants that are operating already.

We're going to look -- in coordination with the Federal Emergency Management Agency, we're going to look at the emergency preparedness plans, and we've got an emergency preparedness expert with us this evening -- or this afternoon, in case you have any questions in that area.

And finally, of course, we're going to look at personnel training and make sure that everybody who is doing a job associated with these plants is qualified to do so.

We said we wanted you to have a good idea how you can participate in the review process, and where you can have access to information. Well, one of the -- ah, yes -- okay, sorry -- yes, one of the places that you can find all sorts of information is at our electronic public reading room, public document room.

Also, virtually all of the meetings that we're going to be having with South Texas on the subject of this plant are going to be open to public -- to -- open for public -- not participation, excuse me, open for public attendance.

We post meeting notices on our website, and we get those posted about 10 days before the meeting.

I understand that it's not often convenient for you to come to one of our meetings, so we also publish meeting summaries and post those on the website as well.

And then, another opportunity for you to comment is going to come later on in the review process. It's called the meeting of the Advisory Committee on Reactor Safeguards. When we're -- when the staff has got its safety evaluation to a point where it's in pretty good shape, we meet with the Advisory Committee on Reactor Safeguards and we present our findings and our review of the application.

The Advisory Committee is an independent body that reports directly to the Commission. We have -- the meeting is open to the public and members of the public can register to talk at that meeting and present any questions or concerns you have directly to the Advisory Committee.

And finally, there is the hearing process. On December 27 we published in the *Federal Registe*r a notice for opportunity for a hearing, which offers an opportunity for the public to participate in the hearing as a party, and this is called intervention. A request -- if you want to intervene, a request has to be filed within 60 days of the original *Federal Registe*rnotice. And in this case, that period is going to expire on February 25.

I'm not going to go into any more detail about the hearing process. We've got some very fine attorneys here this evening, and when we get to the question and answer period, if you have any questions regarding that, they will be more than happy to field those.

Okay. This is just kind of an overall flow chart. It shows where we are. We've received the application, and as you can see, there are two branches of review that go on in parallel. There's the safety review and the environmental review. And this is the way it's supposed to work, but nothing ever works the way it's supposed to.

We received, as I said, the application, and docketed it on November 29, 2007. By a letter dated January 10, 2008, South Texas informed us that they were having some challenges in arranging for some design support that would be necessary to further push this project forward, and they asked us to place some of the safety review on hold, which we did. And we documented that in a letter on January 30, 2008.

The environmental review will continue, and with that, I'd like to turn it over to Paul.

(Applause.)

MR. KALLAN: Thank you, George.

I thank you for coming out this afternoon to understand our process.

My name is Paul Kallan, and I'm with the Office of New Reactors. I'm also the Environmental Project Manager for this project.

And you may be wondering why there are two project managers, one is the safety and the other environmental. The answer is simple. It's because the NRC's mission is to ensure the safety of the facility, as well as to protect the environment. These are equally important tasks. In recognition of that, the NRC has two project managers to oversee the process.

So I'm here to talk to you a little bit about the National Environmental Policy Act. The goal of the National Environmental Policy Act is to create conditions under which man and the environment can exist in productive harmony.

The National Environmental Policy Act requires the NRC to do an independent evaluation. So we use a systematic approach to doing environmental reviews. An environmental impact statement is required for major federal actions that may significantly affect the quality of the human environment. Issuing a combined license, such as for this project, would be considered a major federal action.

This slide illustrates the environmental review process. There are many steps to this process, and there are many ways for the public to participate. We would like the public to participate, and therefore we have the public scoping meeting, such as this afternoon, where we try to give information on our process, and receive your concerns. There's a large contingency of technical teams from the NRC to cover all these areas.

We accepted the application in September 2007. Our next step is to do the site audit, which we are conducting this week. We look at the application to see what is in -- what was given to us. We try to do our independent evaluation ourselves, by looking for issues that we try to cover in our reviews.

Also, we schedule at this time a public scoping meeting, such as the one this afternoon, so you can give us your comments. Along with the public participation we get comments from the federal, state, tribal and local governments.

We take all this information and draft an EIS, an environmental impact statement, that we will issue for comments. After the document is available, we'll make -- we will have another meeting to comment on the document and get your concerns.

Finally, we draft -- or we write the final impact statement, which is based on the draft environmental impact statement, and we incorporate the additional comments. The NRC has a public hearing, and after the hearing is completed, the agency makes a decision.

So you may be wondering what is scoping. Scoping is participation of diverse groups. This is necessary for full understanding and consideration of all the potential environmental impacts of a proposed agency action and it's alternatives.

But discussing and informing the public of the emerging issues related to the proposed action, agencies may reduce misunderstandings, between the NRC and the public, build cooperative working relationships, educate the public and the decision makers, and avoid potential conflicts.

For example, I just wanted to give you an example with a past scoping meeting we had with VOGTLE where a member of the public had mentioned how the U.S. Army Corps of Engineers was managing the flow of the Savannah River. Based on that comment, the NRC held a meeting with the Army Corps of Engineers to discuss issues on drought levels in the Savannah River.

So the information identified in this scoping process, such as this meeting, is evaluated and considered in our environmental report. The public has the opportunity to make comments until February 18, 2008.

So how does the NRC make an independent evaluation of the environmental impacts? We don't only look at the application that the applicant has given us, we also have our own site audit that we do ourselves.

Also, we receive public comments, such as at these meetings. The reason for this is because public comments are important to us because you live here, you know best of what's important, and you can give us good information with regards to the environmental impacts of the project.

We talk to social services and other areas, such as socio-economics and environmental justice. We also talk to federal agencies, such as EPA, FEMA, Army Corps of Engineers, and Fish and Wildlife to name a few. We also have a long list of agencies that we contact to get their expertise. We also look at the state, local, and federal, tribal agencies to get their input on local conditions.

On this slide we look at the environmental review areas. I just wanted to give you another example. We have a large team of experts that look in different areas. We look at socio-economics, environmental justice, aquatic and terrestrial ecology, water quality, hydrology, land use, radiation protection, atmospheric science. We also look at transportation of radioactive material and decommissioning.

The staff has begun its environmental review. A schedule helps the staff organize its review and use its resources efficiently. Normally staff would expect to issue a draft environmental impact statement in 18 months. However, as part of this review, the staff has identified additional information necessary to determine a detailed schedule.

While the schedule is uncertain, we'll be posting updates on the NRC website.

Here are some milestones on the environmental review. Scoping comments will be accepted February 18, 2008. The public can petition to intervene till February 25, 2008. Also, we have still to determine the draft EIS, also the public meeting to the draft environmental impact statement, and the final impact statement.

As the review progresses, we'll give you updates on these dates. The review schedule will be available on the NRC website. And the NRC website is listed below on the slide.

We encourage public involvement in the review process. It's important in our process. The public can make comments during the comment period for the scoping meeting, as well as the draft environmental impact comment period.

Throughout our environmental process we hold public meetings to give information to the public and to explain our process. The next public meeting will be the draft environmental impact statement meeting. The NRC hearing is another way for the public to participate. The public can file petition to intervene February 25, 2008.

I'd like to point out that the Commission recently passed a rule for e-filing which requires a digital certificate. The digital certificate will -- usually takes about a day, so interested parties can review the instructions on the notice of hearing on the NRC website. The hearing covers both safety and environmental issues.

We welcome your written comments and we do hope you have comments today. Other ways that you can provide comments is by mail at Chief Rules and Directives Branch, Division of Administration Services, Mail Stop T6059, U.S. Nuclear Regulatory Commission, Washington, D.C. 20555; or by e-mail, stp_col@nrc.gov; or in person at 11545 Rockville Pike, Rockville, Maryland 208532.

Here's a list of contacts. Please contact George Wunder, who's the Safety Project Manager, or my self, for environmental issues. And here's a list of acronyms that we thought would be helpful in your environmental review.

MR. CAMERON: Okay. Thank you. Thank you, Paul --

(Applause.)

MR. CAMERON: -- Nilesh, and George.

And by the way, the William Burton who was mentioned on the slides is the William Burton right here, Chief of the Environmental Branch.

(Applause.)

MR. CAMERON: We have a few moments for questions before we get to the speakers. Are there questions about the basic process that the NRC is going to follow? And we'll come back down -- let's go to this gentleman here.

Please just introduce yourself to us, sir.

MR. CAMPBELL: My name is Steven Campbell. I'm a resident of San Antonio. My question is for Mr. Wunder.

In the information that CPS Energy has posted on their websites, it speaks to a Toshiba reactor and infers that perhaps it's going to be manufactured by Toshiba in Japan. You mentioned General Electric.

Could you clarify that for me, and particularly who's going to be the designer of record, and responsible for meeting 10 C.F.R. 21 and 10 C.F.R. 1555?

MR. CAMERON: Okay. Thank you. Thank you, sir.

George?

MR. WUNDER: Well, the information that we have -- the application that we have is for the General Electric reactor. We do not have anything in-house currently regarding that, and we've got people here from South Texas, and I think it's more appropriate that they address that.

MR. CAMERON: And do you want to do it for us?

MR. RICHARDS: Yes, currently Toshiba is in the plans to design an build the GE-certified reactor, and Toshiba will be the designer of record for the plant.

MR. CAMERON: Okay. And your name, sir, is?

MR. RICHARDS: My name is Kevin Richards.

MR. CAMERON: Okay. And I'm going to ask, when we -- I think that there'll be some other speakers from South Texas later who may amplify on that for you. Okay. So we'll come back to that one.

Sharon?

FEMALE VOICE: Hi. There was a reference made to a safety expert who is here, and I'm wondering two things: who that person is, and what agency they represent; and if there's someone here today, since the agencies should be working together, from Homeland Security or from FEMA?

MR. CAMERON: When you talk about a safety expert, do you mean an emergency planning expert?

FEMALE VOICE: Well, the speakers earlier referenced someone who is here.

MR. WUNDER: I think it must have been me. And it must have been -- you're probably referring to me. And, yes, it's one of our own people here. His name is Dan Barss [phonetic], and he's an expert in emergency preparedness.

MR. CAMERON: And Dan is right back here.

FEMALE VOICE: And is he NRC?

MR. WUNDER: He is NRC, yes.

MR. CAMERON: Okay. Yes, sir?

MR. STINER: Eric Stiner of Bay City. How many licenses have you all approved that have been through the full process in America?

MR. CHOKSHI: There are currently 104 operating plants, in which are -- but in terms of the new applications, we have in-house several combined operating license and early

site permit applications. We granted I believe three or four early site permits already, but we are reviewing the other ones.

MR. CAMERON: Okay. Yes, sir?

MR. HERMAN: Greg Herman, San Antonio. I also was curious about the operating company. My understanding is that the containment vessels have already been ordered from Japan. Is that the case?

MR. CAMERON: Can we just have a quick answer to that? And the company will be here after the meeting for any extended discussion.

But, Mark, can you --

MR. McBURNETT: Mark McBurnett. I'm Vice President, Oversight and Regulatory Affairs of the South Texas Project.

Yes, we have orders in place for the forging slots for the reactor pressure vessels with Japan Steelworks in Japan. They are the only source in the world that has the capability of fabricating these ultra-large forgings, and the demand on that facility is high. In order to get into there, you have to get in early and get your order in, and that's what we've done. Thank you.

MR. CAMERON: Thank you, Mark.

Let's go to this gentleman here, and then we'll go back to you, sir.

MR. REED: Cyrus Reed, Austin, Texas. I had two quick questions. One, it was mentioned, I believe by the second speaker, about a letter to the company indicating that there wasn't enough information to proceed on some parts of the application.

Can you just verify that and respond? In other words, my question is, why has the application been accepted and docketed if there's information out there that has yet to be obtained?

MR. WUNDER: No, and thank you very much for asking that question. I should have probably amplified that, and in tonight's presentation I will.

The fact that they are not currently ready to support a full NRC review shouldn't -- does not reflect on the adequacy, the completeness, or the acceptability of the application. All it means is that, as we go forward with the review -- we have to ask a lot of technical questions, and it's a very give and take, very active, aggressive process, and they simply aren't ready to support a review in full right now.

MR. REED: And my second question, which is somewhat similar to the last speaker, he mentioned that in terms of the environmental review, they were going to need additional information from the applicant.

And, again, my question would be, if the environmental review isn't really ready for us, the public, to provide comments on, then why are we here today, or what sort of additional information are you talking about?

MR. KALLAN: Well --

MR. CAMERON: And, Paul, you're going to answer that. You may want to talk a little bit also about the process that the NRC typically goes through with an application of this kind too.

MR. KALLAN: Well, the idea is that usually we have -- we ask the applicant for additional information, and which is what we're doing right now in the site audit. And with that we'll be better prepared to have a schedule.

I mean at this present time we felt that it had sufficient information to docket, and we're continuing with our review. We will -- you know, as to -- for the -- as we continue we will ask for further information if we need it. But at this present time, you know, that's --

MR. CAMERON: And, Paul, are those requests that we make to the applicant and their answers -- they're all part of the public record if the public wants to look at that?

MR. KALLAN: Yes.

MR. CAMERON: Is that correct?

MR. KALLAN: That's correct.

MR. CAMERON: Okay. Yes, sir?

MR. SIMON: Pascal Simon from Bay City. I just need clarification. You referred to the Advisory Committee on Reactor Safeguards meetings. Where are those meetings, who are those people, will -- you do say the public's invited, but what opportunities will there be for that?

And the second question is, on the environmental review schedule slide you referred to the draft EIS-TBD. What is TBD?

MR. CAMERON: Thank you.

MR. KALLAN: The EIS is the environmental impact statement, and to be determined.

MR. CAMERON: TBD is to be determined. We don't know --

MR. KALLAN: We don't have --

MR. CAMERON: -- exactly when --

MR. KALLAN: -- as of yet we don't have a schedule since we --

MALE VOICE: [inaudible]

MR. KALLAN: Oh, getting information from the applicant.

MR. CAMERON: Okay. In terms of the Advisory Committee, can you explain who they are, what their function is, where they hold meetings, Nilesh?

MR. CHOKSHI: Yes, the Advisory Committee on Reactor Safeguards is, by statute, a committee. The 10 C.F.R. requires that we have this independent advisory board which provides advice to the commissioners.

And so it's an -- within the NRC it's an independent group of people. These are technically -- nationally known technical experts in different areas of reactor safety, science, and nuclear engineering.

And all of the safety reviews, particularly the major safety reviews, the staff makes its findings, goes and presents it to the ACRS, and ACRS conducts its reviews and then provides independent opinion to the commissioners.

And normally it's a couple of rounds of meetings, then a draft safety evaluation report, and also the final evaluation report. In many important actions, the Advisory Committee will come down to the local community also, particularly when it -- things more like licensing a nuclear facility.

Now we haven't done any licensing recently, but my anticipation will be that, if you get to that stage, then you will see ACRS meetings -- at least one of the meetings will be held here, but normally the meetings are held in the first week of the month in Washington at the NRC offices. But their meeting notices are regularly posted on the website, and you can go and look at their schedule.

MR. CAMERON: And are those -- those ACRS meetings are transcribed so that people can view --

MR. CHOKSHI: Yes.

MR. CAMERON: -- the transcript?

MR. CHOKSHI: Yes, the transcripts are also available. Good point. Yes.

MR. CAMERON: Yes. And we talk about a number of meetings, including ACRS, is it -- can we tell people, if they want to know when we're having meetings with the applicant, the staff, when the ACRS, is there an easy way for them to find out when those meetings are happening?

MR. WUNDER: It's on our website.

MR. CAMERON: Okay. So you go to www.nrc.gov, and then you would go to the public meetings --

MR. CHOKSHI: Yes.

MR. CAMERON: -- click on the public meetings banner and that will tell you all the meetings.

Yes?

MS. DANCER: My name's Susan Dancer from Blessing, Texas, and my question is -- I have two questions somewhat related. One, if I understand correctly, the EIS, the clock is ticking, so to speak, and the 25th of this month, 20 days from now, is the last chance the public has to file any kind of official contingent. How do you justify that with us having to file contentions against an incomplete EIS?

And the second part of that question is, is there -- I hear, you know, much money's been spent already, major equipment is on order for the plant. Is there any chance at all that the application will be denied?

MR. CAMERON: Okay. The first part of the question I'm going to -- I think I'm going to ask our representative, Jim Biggins, from the Office of General Counsel to clarify what the different deadlines are, and answer that question. And then we'll go to Nilesh for the second part.

Jim?

MR. BIGGINS: Thank you. Jim Biggins with the Office of General Counsel at the NRC.

As far as the information in the application, the application was complete in order for us to docket it. And an intervention period from the date of docketing has already begun, and the information is available and has been available in order for those interested to intervene to review the information and determine whether they are going to intervene in the case or not.

That is separate from the comment period for the scoping process, which does end on the 15th. However, we do allow comment after the draft EIS is issued.

So I want to be sure, does that answer the first part of your question?

MR. CAMERON: And let's just make sure that people know the two dates. The date for comments on scoping is February --

MR. BIGGINS: Fifteenth.

MR. KALLAN: Eighteenth.

MR. BIGGINS: Oh, pardon me, 18th.

MR. CAMERON: Okay. And the day that intervention petitions have to be filed is February --

MR. BIGGINS: Twenty-fifth.

MR. CAMERON: -- 25. All right. Now the second part of the question I think is -- are you done -- are you done here? Go ahead.

MR. BIGGINS: I'm done. I just want to make sure we remembered that second part. It's if they already ordered components, or started that process, whether the -- there's a possibility that the application could be denied. Is that correct?

MR. CAMERON: That sounded like the question.

Okay. Nilesh?

MR. CHOKSHI: Yes, can we clarify what was the question? What -- is there --

MR. CAMERON: I think the question is is that we've heard that the company is obviously investing in time and effort and everything, ordering, or at least getting in line for the reactor vessel. Does that still mean that there is a possibility that the application would be denied?

And I think that you know the answer to that one.

MR. CHOKSHI: Yes. I mean, we have very specific requirements and regulations and we have to make sure that the application is in compliance with all of our regulation requirements before we can pass a judgment. But the fact that they have ordered a component doesn't have a bearing on our review at this point.

MR. CAMERON: Okay. Thank you.

Let's -- I think we have time for one more question. I think Tom Smith has it, and then we'll go to comment.

MR. SMITH: Tom Smith, public citizen. Let me go back and clarify your answer. On the 30th of January you all sent a letter NRG basically saying there were so many deficiencies in their application that you were suspending review of components of that application because there simply wasn't enough information for you all to make an informed judgment about the quality of those particular sections of the application. I'm paraphrasing your language.

How can we in the community have a fair and adequate opportunity to review the adequacy of the application, make an informed judgment about whether we might want to intervene, or whether or not there might be contentions that should be raised in those of the application that you have acknowledged to the -- or indicated to the applicant that you don't feel are adequately complete?

MR. CAMERON: That's a good question.

Jim Biggins again.

MR. BIGGINS: Yes, Jim Biggins with NRC. It's not that we believe the application is incomplete. We believe the application is complete and we docketed it as a complete application. Our letter indicates our response to STP in regards to their request that we hold off on the review process on the safety side of the application, on portions of it.

And we agreed to hold off on our review process. That is in response to their explanation that they have difficulty currently lining up the support to answer the questions that the staff would raise during our normal review process.

During our review process for any COLA application, we are, of course, going to ask questions, ask for additional information. This is part of our normal process. We submit requests for additional information to them, we conduct audit activities. And during this process we get clarification on things that the staff believes need clarification in the application.

Many applications go through a revision process, and the applicants submit revisions to their application with additional information. The initial intervention period is based on docketing of the application, which we believe is complete.

When new information does arise, our rules provide a process to ask to intervene in a late file contention. And that process does allow the public to intervene in the case beyond the initial period, according to the requirements in the regulation.

MR. CAMERON: So, in other words, you would recommend to someone who was interested in intervening is to take a look at the environmental report and what's in the safety analysis and decide on that whether they wanted to intervene and to form a contention, but if that there's information that has not been detailed yet, that they would have an opportunity to raise a contention later on?

MR. BIGGINS: That is correct regarding our process, yes.

MR. SMITH: And may I ask for the same courtesy that you're offering the company, because the application, as I understand your regulations, is woven as a whole and needs to be judged as a whole. And I believe your answer is just as incomplete as their application.

And I would like to ask for the same opportunity to say, Geez, we're not ready yet to have all of our contentions and to have the opportunity, as time goes on, for a free pass, just as you've given the company, to modify our contentions.

And yet from my understanding of your records, that is not a likely granted favor for contestants, people who would want to, but it seems to be a likely granted favor to the applicant. Will you guarantee us a free pass on any contentions we might want to raise on documents that might later come to your -- across your desk from the company?

MR. BIGGINS: We're not in a position to, as you say, grant a free pass. We have the open period for contentions currently, and a contention can be filed during this period. And as I said, we have a process to allow contentions to be filed later.

MR. CAMERON: And, Tom, and for all of you who have the same concerns, this issue will be taken back to the NRC staff and commissioners, but to leave nothing to chance, if this is a concern, I think we would all recommend that you send a formal letter into the Commission and the licensing board, and state the reason why either it should be postponed in terms of filing for intervention, or that your request later on, on information that isn't there, should be held to a lesser standard than the late file contention.

MR. CHOKSHI: Yes. I think I want to emphasize that we heard the concern, and, you know, we cannot give an answer because this is a very formal process, but I think, as Chip said, noticed and we can do -- you know, inform the right people. So I think follow Mr. Cameron's, suggestion.

MR. CAMERON: Okay. We have one small question.

MS. HADDEN: Yes, it promises to be short. In the process of working on COL plant issues, we learned that many of the supplies needed for a large construction project are in short supply, not very available, costs have gone up. In some cases some companies wanted to import steel from abroad that did not meet U.S. standards for tensile strength.

What are you doing and what can you guarantee in terms of the metals that are imported? Will they have to meet U.S. standards for all steel used in the reactors and on the site?

MR. CAMERON: And this -- you may want to address this when we get to the -- you want to address this when we get to your -- you want to do it? Okay. MR. McBURNETT: Mark McBurnett from South Texas Project again. Yes, under nuclear plant operation and construction, we operate under a quality assurance program, it's 10 C.F.R. 50, Appendix B. It's a program approved by NRC.

Our components are required to meet ASME, American Society of Mechanical Engineers, codes. That's all the metal in the plant and that are in safety related applications. That has extensive testing requirements and verification requirements in all the steps of the process from original work in the foundry all the way through to delivery to the plant, the final verification that the material is what it was sold as.

MR. CAMERON: And I would just add also the NRC has requirements that -- in terms of quality assurance and other things, that the equipment that is -- I hate to say important to safety, use that phrase, but has to meet certain standards. And if someone during -- after the meeting can talk to Karen, or online?

But, listen, thank you all for those questions. And we're going to go to the part of the meeting where we listen to all of you. And I'm just going to ask you to come up here, and we have Representative Mike O'Day with us, State Representative, and I'm going to ask him to come up here and address us first.

(Applause.)

REPRESENTATIVE O'DAY: Thank you, Mr. Chairman.

First I'd like to send a message from Judge McDonald, he's in Washington, D.C. today taking care of issues for the county, and he apologizes for the fact that he wouldn't be here today. And to yours and his demise, I'm going to take his position on this. Okay. But I'm also going to say what I have to say doesn't necessarily -- or is not the words of Judge McDonald.

First, I would like to say I'm Mike O'Day. I'm the State Representative from District 29, which has all of Matagorda County and the western portion of Brazoria County. And [#1 Support-Plant] 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.

I am a water contractor by career. I spent 35 years in the water industry. I served on the Brazoria County Ground Water Conservation District; I sit on the Natural Resources Committee in the House of Representatives, and I sit on the Culture, Recreation, and Tourism, which also takes care of fish and game, and the parks in the state of Texas.

I say that to you because I want you to know, I'm not somebody that just came down here to talk to you because it's something I felt about. I'm a resident of the county -- I say a resident -- I spend a lot of time in the county. My pleasure home is here in the county. And I love Matagorda County. A lot of my work is done here in the county.

[#2 Support-Nuclear Power] I support, personally, clean and safe nuclear energy.I've had a lot of chances -- fortunate enough I've traveled around the world a lot. There's a lot of nuclear plants around the world. We quit making nuclear plants in the United States for the last 29 years, I believe.

[#3 Support-Nuclear Power] 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.

[#4 Support-Nuclear Power] 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.

[#5 Support-Plant] 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.

And I'm available for any questions that anybody would like to give, or ask me at a later time. And thank you for the time to speak.

MR. CAMERON: Okay. Thank you, Representative O'Day.

(Applause.)

MR. CAMERON: We do have a letter from Judge McDonald that we're going to accept as a formal written comment, and attach it to the record.

And since I'm on that subject, we also have a statement from Polly Hearn, Kay Lawson, Roberta Ripkey, Debbie Morris, who are residents, and we're also going to put that on the record.

We're going to go next to Sheriff James Mitchell.

Sheriff Mitchell?

(Applause.)

SHERIFF MITCHELL: Thank you. Good evening.

My name is James Mitchell, and I'm your County Sheriff. I've served in that capacity here for the past 12 years. I'm currently serving my 26th year in law enforcement here in Matagorda County.

Again, I tell you these things for important reasons. I've lived my entire life in Matagorda County, most of it in Bay City. There were two generations of Mitchells before me, and there has been two generations of Mitchells since me, being my children and my grandchildren, who I intend to raise here and be happy with.

[#6 Outside Scope-Security and terrorism] 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.I work very closely with the officers out at the nuclear plant, my officers actually train with their security officers.

I share a SWAT team with the Bay City Police Department, a 15-man SWAT team. Most of those officers on that SWAT team got their basic, intermediate, and advanced SWAT certification at that nuclear plant.

My officers on the SWAT team, and even many of them on the street, carry compatible weapons so that in an event we can exchange ammunition clips, magazines, the whole thing. We've always been there to back the plant up in any way that we can, and we will continue to do that.

As I said, I have, you know, 26 years in law enforcement, and most of that has been working with the nuclear plant in one capacity or another. At the present time my wife is

the senior security coordinator for the nuclear plant. And that's only been going on since last April, so that's to what's motivated me to speak here today.

[#7 Support-Licensing Action] 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.There's never been an incident, a security based incident at our nuclear plant that has not been handled properly and professionally. And there's no doubt in my mind that that will continue with the additions of these two new plants.

So I would encourage this, and I hope the citizens of Matagorda County will also. And as Representative O'Day, I'll leave some cards out on the back table, and if anybody has questions, I'll be glad to take those later. Thank you all.

(Applause

MR. CAMERON: Thank you, Sheriff.

Next we're going to go to Mayor Richard Knapik, Bay City mayor.

(Applause.)

MAYOR KNAPIK: Thank you, Chip.

To the NRC staff, those seated here and those in the audience, all of my fellow citizens, and visitors from far away, I want to say welcome to Bay City.

[#8 Support-Licensing Action] I'm glad you all left the acronym sheet up there. 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.

[#9 Socioeconomics] 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.

[#10 Support-Plant] 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. The American Red Cross, they're always there to help them, the American Cancer Society, the Relay for Life. They've grossed over $100,000 in the past three or four years thanks to the involvement of STP.

Their employees care. They serve on our city councils, they serve on our school boards, they're involved in economic development, they're involved in all aspects of our community life. I'm here to say -- I want to say thank you for that involvement.

And if we can get 800 more citizens like that, what a great community Bay City and Matagorda County will be. So I urge you --

(Applause.)

MAYOR KNAPIK: [#11 Support-Licensing Action] I urge you to grant the license for 3 and 4.Thank you, and once again, enjoy your stay in Bay City.

MR. CAMERON: Okay. Thank you very much, Mayor.

We're going to hear from Mayor Joe Morton of Palacios, Texas.

MAYOR MORTON: A little too heavy there. (Laughter.)

MAYOR MORTON: Hello. My name is Joe Morton. I am mayor of the City of Palacios. And welcome to our area and our community.

But I'm here today as a citizen, a native Texan, born and raised in Marshall, Texas, and I'm here today to talk about why I am for STP as a person, not as an elected official.

I feel like that my qualifications to make that statement comes from many years of experience. I came to Houston in 1967, worked in the construction of civil infrastructure for 40 years, the last 19 being executive vice president of a construction company in Rosenberg, Texas.

I've installed many miles of pipe, poured many thousand yards of concrete, and also had the pleasure of working with Mr. O'Day in years past in water projects and building waste water treatment plants.

[#12 Support-Licensing Action] 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 great neighbors. [#13 Outside Scope-Security and terrorism] 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.

But all of them, including **[#14 : Support-Licensing Action]** 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. And I look forward to -- for my descendants to live here.

[#15 Outside Scope-NRC Oversight] And I want to praise the NRC for their educated people. And, Bob, they've got a fantastic track record. No other agency in the government has had the challenges that NRC has, other than maybe the Department of Defense, or NASA, in the last 40 years.

And the reason being is because of the educated and highly bright people that they have on staff. They have not made a mistake since they've been incepted. Not one. Other agencies have had mistakes. That's because of the people involved and how much they care and can work.

So I put my descendants' future in their hands, and I believe they'll do a good job. Thank you.

(Applause.)

MR. CAMERON: Thank you very much, Mayor Morton.

We're next going to go to Tom Smith, and then Karen Hadden, and then Bobby Head.

Tom?

MR. SMITH: Good afternoon. My name is Tom Smith, and most everybody calls me Smitty. I'm Director of Public Citizen's Texas office.

And I would like to thank the NRC for holding this hearing, and the people in particularly, the workers at the plant who have worked to make this plant a safe plant. And we wish you continued success in this.

I'm here today to raise a number of issues that I think are of concern in this scoping hearing, and we have submitted a greater length -- more lengthy documents, and we'll submit more additional comments in writing.

But let me highlight a number of them for you quickly, others will speak to you about these in greater depth, and then I'll speak to the issue of the need for the plant in much greater depth in just a second.

[#16 Socioeconomics] 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.

[#17 Health-Radiological] 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.

[#18 Meteorology and Air Quality] 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?

[#19 Outside Scope-Safety] 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?

[#20 Meteorology and Air Quality] 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?

And for those of you who were here in Rita and in other hurricanes, you know how clogged the roads became. That was with three days notice. If you had a couple of hours worth of notice, would you be able to evacuate in time? Are the evacuations plans adequate? Do you have adequate notice, and will you be able to evacuate in time?

[#21 Ecology-Aquatic] 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.

[#22 Uranium Fuel Cycle] What about wastes? The whole community of -- the whole question about the plant being permitted is dependant upon your ability to dispose of wastes. The high-level radioactive waste site in Yucca Mountain has yet to be completed, and just recently they have announced they are laying off staff because of the impossibility of getting that site permitted and operating.

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.

[#23 Hydrology-Groundwater] 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?[#24 Transportation] Transportation, how will the materials and the waste come in and out of this community?[#25 Environmental Justice] Environmental justice, what will the net impact be on your taxes and the community, the low-income communities of color?

[#26 Uranium Fuel Cycle] 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.

[#27 Need for Power] 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 base load. And it is impossible to really utilize other resources like energy efficiency and renewable energy as base load.

[#28 Alternatives-Energy] 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.

None of those data are analyzed appropriately in this document. [#29 Socioeconomics] And those are the bread and butter. 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?

Thank you all very much for you time. And good luck with your review.

(Applause.)

MR. CAMERON: Thank you. Thank you, Smitty.

And Karen?

MS. HADDEN: Good afternoon. My name is Karen Hadden, and **[#30 : Opposition-Nuclear Power]**

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.

For one reason, they do not solve the global warming problem. That's been discussed a lot of times as a rationale for building nuclear power plants.

But instead they would divert huge resources that right now are desperately needed to go into technologies that are safe, clean, that exist today. Wind power on the coast can be developed much further providing jobs. Solar power can be developed on the coast. Texas has an incredible wealth of wind and sun. Those types of technologies are life-giving and sustainable.

[#31 Uranium Fuel Cycle] 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.[#32 Cumulative Impacts] 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.

[#33 Outside Scope-Security and terrorism] And, again, workers will probably be coming from around the world. Security is going to be a very serious concern.

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.

[#34 Process-ESP-COL] 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.

[#35 Process-ESP-COL] 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.And I'd like to explain why.

[#36 Outside Scope-Safety] 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.

In the meantime, they've had to buy spot power on the market for LNG. It's costing them huge amounts of money. For the first time TEPCO in Japan is running at a deficit, and not meeting their global warming commitments.

To come back to the reasons why this process should not go forward as it is right now, the draft environmental impact statement will not be ready, the draft, for at least 18 months, according to what we've been told her today. That is supposed to be finished, by law, before a license can move forward.

This is under the National Environmental Policy Act, or NEPA. There's two main components to it. It says that those who propose a project have to take a hard look at environmental impacts, and, part two, that the process is meant to provide meaningful public participation in identifying the potential environmental impacts and responding to the analysis.

[#37 Process-COL] 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.

[#38 Process-COL] 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.

[#39 Process-COL] We have a licencing 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.Thank you.

MR. CAMERON: Thank you very much, Karen.

(Applause.)

MR. CAMERON: Usually we don't respond to what we're listening to here, but just to make sure that -- because this is important for all of you -- just to make sure that our process is clear, I've asked Jim from our Office of General Counsel to just clarify a little on how the contentions and draft environmental impact statement are treated.

Jim?

MR. BIGGINS: Thank you, Chip.

The draft environmental impact statement is essentially a complete environmental impact statement. It's called draft because we accept public comments after it comes out. And then the process of our application review continues while we incorporate those comments and the concerns from those comments into the final environmental impact statement.

In addition, our rules do allow for intervention after the draft impact statement, or after the final environmental impact statement, as long as those who seek to intervene meet the requirements for late intervention.

And I really just wanted to comment on the process, and there we go.

MR. CAMERON: Okay.

MR. BIGGINS: Thank you, Chip.

MR. CAMERON: Thank you very much, Jim.

And we're going to go to Bobby. Bobby had -- Bobby, are you here?

(No response.)

MR. CAMERON: Okay. He may be coming tonight. I want to ask Mitch Thames, and then Cyrus Reed, and then Robert Alvarado to come up.

Mitch?

MR. THAMES: Yes, sir.

MR. CAMERON: And Mitch is the head of the Bay City Chamber of Commerce. Correct?

MR. THAMES: Absolutely. We appreciate you all. Thank you so much.

(Applause.)

MR. THAMES: My name is Mitch Thames. And I probably have one of the luckiest jobs her in Matagorda County, and that is being a part of the Bay City Chamber of Commerce and agriculture.

It's a great honor to have a lot of my neighbors here. I see you. Thank you so much for your attendance. We've got some visitors. Be sure and pick up a visitors guide and make sure you come back to this great county.

You know, we talk a little bit about in the environment. [#40 Ecology-Terrestrial] Let's talk a little bit about Matagorda County. I'm going to tell you right now, North American Audubon Christmas Bird count winners 10 years out of nine [sic], they stole it from us one year, 236 species of birds identified in a 12-hour period right here in Matagorda County in a 15-mile circle. We are the birding capital of the nation, if not the world.

[#41 Ecology-Aquatic] But I want to tell you, it means a lot to us. Our environment is everything. We've got a river flowing down with fresh water, we've got two bays and estuaries, we've got the Gulf of Mexico. What a sensitive environmental location.

We have got some of the best fishing in both bays. I'll tell you right now, great, great economic benefit. Deep sea fishing, you know it's tremendous, as well as fishing in the river. Our water fowl hunting is absolutely tremendous. It has been that way for many, many years. I used to say we were the undiscovered Gulf Coast. We were a gem.

Well, we've been discovered because a lot of you live here because of that. I know I do. I chose to move to Matagorda County because of its location in Bay City, it's quality of life, the opportunities that we had for you and I to work together to grow this community. And grow it we have. [#42 Socioeconomics] From an economic development standpoint, let us go back, those of us that lived here, and those that are visiting, let me tell you, living here four and five years ago with a 14 to 17 percent unemployment rate was not fun. And our economy flat, if not declining. We, the citizens right here, decided that that was not acceptable, and that we weren't going to live like that. And we went out and aggressively are seeking investment opportunities both jobs.

I'll tell you this, for a young person, looking for a high paying job in Bay City, Texas, in Matagorda County years ago, the prospects were not well. They would go off to -- there was not any higher education. Once they graduated high school, we could probably offer them a service job for under $10 an hour. You can't make a living wage, you can't buy a house, you can't raise a family on that.

So the job right now, and the job that I'd signed up for, and the leaders here in this community, is to grow this economy. To get the high paying jobs so we can grow those roof tops so my kids get an opportunity to come here and make a living, and my grandkids get to grow up here. Matagorda County, absolutely something.

[#43 Support-Licensing Action] 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.

I want to extend a very, very warm welcome on behalf of Matagorda County. Thank you so much for your attendance. Thank you for the process. Thank you for leaving your homes and coming down here and spending some time with us. So we certainly do appreciate you. Thank you.

(Applause.)

MR. CAMERON: And while Cyrus is coming up, this would be an appropriate time to -- for the NRC to express our appreciation to Bay City and the Chamber of Commerce, and especially to Mitch for the hospitality and the meeting room and all that help. Thank you.

And this is Cyrus Reed of the Sierra Club.

MR. REED: Hello. Good afternoon. My name is Cyrus Reed. I'm here on behalf of the Sierra Club. I'm not a native Texan. I did come here in about 1990. I'm very proud of Texas, I'm glad that I live here.

I don't come here in any way to disparage the hard work that the folks of Matagorda County are doing, or the workers at STP, or those investing. I do come here, however, to raise some concerns about the environmental assessment, the environmental report.

[#44 Process-ESP-COL] 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.

[#45 Alternatives-Energy] Let me start by talking about demand. And it's something that was mentioned earlier about how we get our power in the future. A number of studies have been suggested -- a number of studies have been mentioned that suggest that Texas could be getting more of our energy from energy efficiency, from renewables, as we have been.

[#46 Need for Power] And I wanted to make sure that the NRC is aware that legislation was passed last legislative session, and I'm pretty sure Mr. O'Day voted for it, 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.

[#47 Alternatives-Energy] 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.

And so I would urge you to expand that part of your environmental analysis to look at that. And we will be providing comments.

I also wanted to say -- and I hope that I get an opportunity in the near future to visit here the Matagorda Bay and the river. [#48 Hydrology-Surface Water] 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.

[#49 Meteorology and Air Quality] But I guess our concern would be, if what this scientists tell us is correct, and if we're likely to have more droughts, more hurricanes, how is that going to impact the operation of this plant.[#50 Benefit-Cost Balance] 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.

So, again, I would urge you to -- and we can provide some information on some of those analyses in Texas for reduced water flows. [#51 Hydrology-Surface Water] 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.

So, again, we need to be analyzing the water temperature of the river, and I know that in your case it's -- you know, there's a recycling of the water through the cooling reservoir, but at some point, some of it still goes back into the river. And the question would be -- not correct?

MALE VOICE: Not correct.

MR. REED: [#52 Hydrology-Surface Water] 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.

MALE VOICE: That's theoretical. We've never had to do it.

MR. REED: Okay. Well, the question would be, do we need to analyze that for the future, if the climate changes. [#53 Hydrology-Surface Water] Similarly, hurricanes, if 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.

It seems to me an environmental assessment before we grant this license should look at those factors, and I would urge you to do that in writing.

[#54 Uranium Fuel Cycle] 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.

When I read the environmental assessment, which frankly I did rather quickly, [#55 Uranium Fuel Cycle] 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?[#56 Outside Scope-Security and terrorism] Do you have the security in place to make sure that it's never the subject of terrorist sabotage and airplane attack, whatever? I just didn't see that in the environment assessment. I think it should be there, and we'll provide comments.

[#57 Uranium Fuel Cycle] 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?

[#58 Uranium Fuel Cycle] 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.

I had a question -- this is more of a question, but [#59 Outside Scope-Security and terrorism] 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.

[#60 Uranium Fuel Cycle] And then just in summing up -- and this was already mentioned, but where 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.

[#61 Alternatives-Energy] And then I would just say, sort of in summing up, really the first point I made, if the choice -- 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.

And I'll just sum it up, [#62 Opposition-Nuclear Power] I'm not here as the enemy, but we do have serious concerns with some of these issues and we'll be raising them through the comment. And we think ultimately that the future is not more nuclear plants, it's concentrated solar plants, efficiency, more wind. And that's the Sierra Club's position.Thank you.

MR. CAMERON: Thank you.

(Applause.)

MR. CAMERON: Thank you very much, Cyrus, for those comments.

Robert Alvarado?

(Pause.)

MR. ALVARADO: Hello. My name is Robert Alvarado. I'm from San Antonio, Texas. I was born and raised in San Antonio, and I'm with the Committee to Bring Environment Justice Action in San Antonio.

[#63 Opposition-Licensing Action] 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. We have rivers of chemicals that are running under our homes that have affected not only me, but our community, our children.

And mostly my family has cancer of the throat, my daughter, my wife, myself. I lost my vision because of radiation, by the Leon Creek. And I -- my kidneys have failed. I'm waiting for a kidney. And not only me, but down the street where I live there's like people just dying, mostly once a month, or whenever they're passing away.

And I'm just bringing this for the concern of the citizens of this town, that you might not see it, but the chemicals are there underground. And you see all these vapors come up, and you can't see it, but they're killing you. They're killing you day by day. And it's like you're the living dead. You're just getting sick, which I had no knowledge of cancer. The next one, the next generation is your grandchildren.

[#64 Opposition-Licensing Action] But there's nothing we can do, because I bought that house in 1970 from the government, and I can't go nowhere, at my age, because it's too late for me to move out from that area. And it's a triangle, it's east Kelly and main Kelly, and all the chemicals are running like about 25 feet under our homes.

And we can't sell our homes because we have contaminated underground, and we can't sell the house. We have to mention to whoever wants to buy our house that we have these chemicals under our home. And we've lost our value of our house.

[#65 Opposition-Licensing Action] 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.Thank you.

(Applause.)

MR. CAMERON: Okay. Thank you. Thank you very much, Mr. Alvarado.

And next we're going to go to Genaro Rendon.

And thank you, Mr. Alvarado.

Then to D.C. Dunham and then to Owen Bludau. And this is Genaro Rendon.

MR. RENDON: Hello, everyone. Good afternoon. My name is Genaro Rendon, and I'm a resident of San Antonio, Texas, and a member of the Southwest Workers Union. We're a 20-year-old organization based in San Antonio focused on fighting for community rights.

[#66 Opposition-Licensing Process] First, you know, I would like to share the process that we've been through in San Antonio in dealing with this nuclear reactor, or the proposed nuclear reactors that NRG, in conjunction with CPS, City Public Service, who's our energy provider in San Antonio, are investing in.

First of all, when they submitted the letter to NRC, the letter of intent to apply for a license, they specifically told NRC to keep it a secret. So it was kept a secret, not only from folks here, but it was kept as a secret from folks in San Antonio; these gentlemen may not even know, but that was the situation that we've been dealing with.

[#67 Benefit-Cost Balance] Now, in September of last year, in `07, then they officially apply for the licensing of the two new nuclear reactors. In less than a month, City Public Service is making a decision to invest $206 million into this project. With that investment also saying that they need to increase rates for the City of San Antonio rate payers between 5- to $7 per month.

[#68 Process-ESP-COL] Now we move into this year where the mayor of San Antonio is saying that he wants to develop an energy sufficiency plan. So if 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.

[#69 Process-ESP-COL] So I applaud everybody here for really coming out and participating in this process, for NRC providing a space for folks to participate on this process, for the local paper informing people that this is happening so that they can come and participate, all of which has not happened in San Antonio.

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.

[#70 Outside Scope-Miscellaneous] And when CPS had their board meeting at the end of October, we had to petition the board in order to have citizens go in there and make comment to CPS and to the Board of Directors around this decision that they were going to make.

And once we got there, then we had to -- you know, then they locked on the doors on the community folks that were coming in. And they were finally opened so that we could in and make comment. You know, so it hasn't been an easy process, an open process, a process that has been inclusive of the concerns of the residents of San Antonio.

[#71 Cumulative Impacts] 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.

Many times, you know, when they're doing the impact statement, they're just specifically looking at the nuclear reactor. But as a community, we have to deal with the multitude of environmental problems and concerns. You know, I just saw a chemical plant driving over towards the STP site, and whatever else exists here.

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?

[#72 Meteorology and Air Quality] And I think another important stat is that if 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.

[#73 Uranium Fuel Cycle] And really if we look at the State of Texas as well and we look at this like the death of nuclear power, then like Smitty was saying, in South Texas there's communities that have already been impacted by uranium mining, where their water supply is not good anymore, where now uranium companies and mining companies are moving back in because of the increase of uranium prices that we've seen over these last couple of years.

[#74 Transportation] And, you know, for 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 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.

[#75 Uranium Fuel Cycle] And as well, within 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.

[#76 Uranium Fuel Cycle] 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.

[#77 Alternatives-Energy] So, you know, what is the solutions that we're pushing for, and how should we be investing in these, you know, I think that, you know, folks have touched on solar power and wind power, and the argument is out there, is always out there that, well, you can't produce enough.

Well, you can't produce enough if you're investing $6 million compared to $6 billion that are being invested into nuclear power. If we had an investment of $6 billion to $10 billion focusing on alternative energies like sun and wind power, then maybe we could advance, you know.

[#78 Alternatives-Energy] So, you know, when the argument is put out there, we also have to look at, you know, why is being put there, and how are they not investing and making these things very real here for us in the State of Texas. And as well for us in San Antonio then, how do we use this alternative energy, this green economy, to build and uplift workers and communities within the City of San Antonio?

Mr. Alvarado was talking about his home. In the City of San Antonio homes lose over 30 percent of their energy due to the lack of weatherization, due to the lack of making those homes energy efficient. So if the City of San Antonio focused on providing jobs, green jobs, and producing and fixing homes of the residents in San Antonio, then, you know, we wouldn't have to invest in this type of nuclear power.

So, you know, I really thank each and every one of you for being here. And from San Antonio, you know, we really bring these concerns to the community here, and, again, raising them to the Nuclear Commission, as well as City Public Service, which I hope that there's at least one representative here from CPS. Thank you.

MR. CAMERON: Thank you very much.

(Applause.)

MR. CAMERON: D.C.? How are you doing?

MS. DUNHAM: Good afternoon. I'm D.C. Dunham. I'm the Executive Director for Bay City Community Development Corporation. 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.

And just to kind of name a few of the opportunities that we've been working on already, since the first announcement that we were going to do this expansion several years ago, but we've turned an eye sore into a great asset.

[#68 : Socioeconomics]We've begun developing subdivisions, we've got new spec houses going, we've recruited retail sales into our community, sales taxes are definitely on the rise. We've developed a new associate degree program. We've formed an alliance with our educators and industry, we've had career fairs and job fairs, we've increased our scholarships and our on-the-job training programs.

But let me digress just a moment about that eye sore, my pride and joy, and education, my passion.

That eye sore that I'm talking about is the old K-Mart building down on Highway 60. If you're not familiar with it, then you don't live in Matagorda County, I can assure you, because that's been an eye sore in our community, a dilapidated building, for over 15 years.

But we took the opportunity with the expansion, and working with the management team of STP, to put the headquarters for Units 3 and 4 in that dilapidated building, and we created the Center for Energy Development.

And on the other side we have our training center where we house Wharton County Junior College, and some of our other trainers. We have a park environment in the center that's a 6,000 foot atrium that students can mingle with our industry partners and share ideas. We presently have 162 students in our Bay City campus that I'm real, real excited about. They're preparing for the jobs that are being created across the hall.

This new workforce development is a huge strength for our community, which brings me to my passion, education. **[#80 : Socioeconomics]**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.

It was especially a good problem for a community, as Mitch talked about, that had traditionally had double digit unemployment. The problem was, how are we going to work to create the workforce that's needed by our industry, the huge increase in new jobs that are coming to Matagorda County?

[#81 : Socioeconomics]We formed this alliance that includes all of our regional industry partners, we included community colleges throughout the region, we had all four of ISDs, we have four ISDs in Matagorda County, we had government from the federal government all the way down to our local officials meet together in one room to discuss these issues and how we were going to solve this 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.

So please join me in taking advantage of this opportunity that's before us and whatever your interests or your passion might be, I'm sure, between Mitch and I, we have a committee that you can serve on. Thank you.

(Applause.)

MR. CAMERON: Thank you.

And this is Owen Bludau.

MR. BLUDAU: Good afternoon. I am Owen Bludau. I'm the Executive Director of the Matagorda County Economic Development Corporation.

My corporation is composed of nine organizations, five of which are funding -- public funding entities, including the Matagorda County, the Navigation District in Palacios, the Port of Bay City Authority, the Bay City Community Development Corporation, and the Palacios -- City of Palacios Economic Development Corporation. In addition, on the board are representatives of the four Chambers of Commerce in our county.

[#82 : Support-Licensing Action]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.

I appreciate the opportunity to be here this afternoon to address you, and I want to speak about a couple of the things that approval of 3 and 4 would do to the county, and this is based upon the experiences we've had with Units 1 and 2 being in the county for over 20 years.

[#83 : Support-Plant]STP has been an outstanding corporate citizen that has brought amazing economic strength to Matagorda County. It has been a good industrial citizen. It has been so good that we wanted a second one. We aggressively recruited Exelon Nuclear to come to the county because we thought if STP was good, have two would be even better.

But we were successful in getting them to select our county because we were nuclear friendly, and we welcomed them here. Unfortunately, the site conditions were not such that the site was economically feasible for them. They've gone to their second back up site in Victoria County, and we welcome them being there also.

[#73 : Socioeconomics]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.

[#74 : Socioeconomics]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.

[#86 : Socioeconomics]It's been mentioned that there's going to be construction workers associated with the new construction project, and that's true. STP is looking at about 5,000 construction -- temporary construction workers here over a six year period. They'll not all be here at one time. They will ramp up over time. At maximum construction period they're looking at about 4,000 workers for two years, but then they would ramp down.

We would like to have a lot of them live here. We know that not all of them will, and that's fine. A lot of them are going to commute in, a lot of them may be brought in from Houston who have skills that are not available in our community.

But those 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.

[#87 : Socioeconomics]As has been mentioned earlier, we'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.

[#88 : Support-Plant]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 their 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.

They're our neighbors, they are part of our community. Two of the STP employees serve on my board, but they're not there as STP employees, they're there as elected officials representing other organizations.

We expect that the new people coming in that would work at 3 and 4 will also be part of the community, and take part in it. But we welcome them because we need new blood, new ideas, and new activities. We're an aging community and our organizations are suffering for the lack of new blood coming into them. So these provide economic benefits to the community.

The Sheriff mentioned a little bit of the emergency management planning benefit. You say, How is that an economic development factor. And it is. I'm talking to a lot of industries and when we tell them about the emergency management services and the coordination between our local industries and the public sector, that is important to them, because they know they're going to have the same types of concerns.

[#89 : Outside Scope-Emergency Preparedness]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.

Most of you sitting in this room benefitted from that planning two years ago when Rita was aimed directly at the county and we had mandatory evacuation. It went smoothly, it went quietly compared to what happened in Houston. And this was because we had good evacuation plans and we had good people trained to implement those plans.

In summary, **[#90 : Support-Licensing Action]**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. Thank you.

(Applause.)

MR. CAMERON: Thank you very much for that information.

We're going to go to Jennifer Walker next, and then to Diana Lopez, and then to, I think it's Lara Cushing.

Is Jennifer -- Jennifer's not here I guess. Diana, would you like to come up and talk to us? And then we'll go to Lara. And I guess we might as well to Sandra on -- or, not Sandra-- okay.

MS. LOPEZ: Hi. Good afternoon. My name is Diana Lopez. **[#91 : Opposition-Licensing Action]**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.

[#92 : Hydrology-Surface Water]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.

[#93 : Environmental Justice]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.

[#94 : Meteorology and Air Quality]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.

[#83 : Uranium Fuel Cycle]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.

[#96 : Transportation]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.

[#97 : Uranium Fuel Cycle]And then also you have -- once you have high-level -- 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 one -- the low-level one, you have to use more energy just to get it for it could be used at the nuclear reactor plants.

So as a younger person -- I'm sure none of you all will see in 20 years, 30, 40 years, you all won't see the impacts of climate change, but I will, and I don't think you all should be the ones deciding on the future of my generation.

[#98 : Benefit-Cost Balance]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. Thank you for listening, and thank you for being here, everybody.

(Applause.)

MR. CAMERON: Thank you. Thank you, Diana.

Our next three speakers, we're going to go to Geoffrey Castro and Lara Cushing, and then Sandra Garcia.

MR. CASTRO: Good afternoon, everyone. My name is Geoffrey Castro. I'm the Executive Director for Citizens League for Environmental Action Now.

[#99 : Opposition-Nuclear Power]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.

While it's true that nuclear power plants don't emit carbon dioxide, one of the principle ingredients fueling global warming, **[#100 : Uranium Fuel Cycle]**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.

People living in Goliad County here in Texas notice this first-hand. They also know the lack of protection the government offers to residents when making -- when mining companies decide to mine near their homes. I know all of you have heard a lot about this already today. In addition to that, it offers serious health risks, including cancers associated with the lungs, and bones, and even kidney damage.

[#89 : Alternatives-Energy]

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.

[#102 : Opposition-Nuclear Power]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. Thank you very much.

(Applause.)

MR. CAMERON: Okay. Thank you. Thank you, Geoffrey.

And we have Lara Cushing.

MS. CUSHING: Good afternoon, everyone. My name is Lara Cushing. I came here from San Antonio. I'm a rate payer of CPS Energy. I'm also an organizer with the Southwest Workers Union.

[#91 : Alternatives-Energy]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.

CPS has classified, and I'll reiterate we're -- at this point we're the 50 percent investor in the South Texas Project, so we have as big of a stake as NRG Energy. And **[#104 : Alternatives-Energy]**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.

[#105 : Alternatives-Energy]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.

[#106 : Benefit-Cost Balance]It 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 piece. **[#107 : Uranium Fuel Cycle]**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.

[#95 : Uranium Fuel Cycle]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.

[#109 : Transportation]The transportation of fuel, how 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?

[#97 : Uranium Fuel Cycle]Finally, in 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.

[#111 : Socioeconomics]And I respect the desire for jobs here locally. I do respect that. As an organization that organizes and represents low-income families and low-income workers in San Antonio, we want the same thing for our community. That's why we're pushing for energy conservation programs, weatherization programs that will provide local jobs in our community.

And 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.

In the same way, San Antonio is being presented with a false choice. New nuclear reactors, or all your lights are going to be shut off, when we know that there are alternatives to that.

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.
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So while **[#100 : Uranium Fuel Cycle]**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.

I am going to talk in solidarity with the communities where it's transported through, and I am going to talk thinking of the hundreds of generations that are going to come after me that are going to be struggling with trying to contain the deadly radioactive waste that will be coming out of these plants, and struggling with trying to understand why we chose this path when other paths were available to us.

[#113 : Benefit-Cost Balance]So we all know that the South Texas Project would not move forward without the captive rate pairs of San Antonio to serve as the financial risk insurance. The board of CPS has voted that they can pass on all unforeseen costs of the projects to us in the form of rate increases.

And I and my organization, the Southwest Workers Union, we came here to tell you that we don't want our rates to go towards nuclear energy here, or in any other community. So we deserve a full environmental impact statement that gives efficiency, combined heat and power, renewable energy sources like solar, wind, geothermal, just as much investment in terms of money, in terms of time, in terms of expertise that this nuclear proposal has gotten.

And though it was a little bit lost on me when I was looking through the materials presented by -- or offered up there by the Nuclear Regulatory Commission, your mission is not to actual champion the nuclear industry, and I'm glad that you put up on the slide that your mission is to champion public health, safety, and the environment.

And **[#114 : Uranium Fuel Cycle]**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. I think that's an irresponsible thing to do. And I think that in your role as a champion of

public health and the environment, we do deserve an environmental review that really looks at all the alternative options. Thank you.

MR. CAMERON: Okay. Thank you, Lara. Thank you very much.

(Applause.)

MR. CAMERON: And this is Sandra Garcia. And next we're going to go to Susan Dancer, Cameron Payne, Charles Stillman and Venice Scheurich. I`m sure I didn't pronounce that correctly.

But, Sandra?

MS. GARCIA: Hi. My name is Sandra Garcia. I'm from San Antonio, Texas, and **[#115 : Opposition-Nuclear Power]**I'm a youth organizer at Southwest Workers Union. When the youth found out -- the youth that I work with are from middle school and high school age, when I told them about CPS and the nuclear power plants, and the decision making they've been from the start, they disagree with the nuclear power plants. They -- let's see -- they wanted -- they've gone to the open houses that CPS has provided. We went there, they wanted to get their input, and yet CPS didn't let us. The youth are concerned on how CPS is making their decisions. They believe that not -- they're thinking about their future, even though they won't be here in the future.

[#116 : Alternatives-Energy]They would like to see CPS educating the communities on how to save energy, educating the communities with which light bulbs will save energy, to unplugging the cords of your house and other energy saving measures. CPS should invest their money in lower income families' homes which are probably the highest energy wasters because they're like not energy efficient.

[#117 : Alternatives-Energy]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.

And so these alternatives should be like -- should be fully evaluated for the future of San Antonio and other communities.

MR. CAMERON: Okay. Thank you. Thank you, Sandra.

(Applause.)

MR. CAMERON: Is Susan -- Susan Dancer here? And then, Cameron, we'll go to you. And then Charles Stillman, if Charles is still here.

And this is Susan Dancer.

MS. DANCER: I'm Susan Dancer. I'm a life long resident of Matagorda County, a founding chairperson for the Matagorda County Coalition for Nuclear Industry Accountability. It's kind of a mouthful, MCCNIA we're known as.

And if you all will bear with me stumbling so much in my presentation, I will try to not bore you like watching drying paint with -- and by belittling and berating points that have already been made.

The MCCNIA is a grassroots organizations that formed in 2005 in an attempt to give voice to issues created by STP that had negative implications to our community, and to support the STP employee base as they struggle with an uncertain future and financial and emotional consequences of destruction of the career paths.

As I said earlier, I don't want to go into great detail about issues that have been raised over and over again. I know you all have heard enough of it, but **[#118 : Health-Radiological]**I do want to go on record and say that I am concerned about increased cancer rates, and **[#119 : Uranium Fuel Cycle]**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. That's been, you know, a big problem I guess all along.

And **[#120 : Alternatives-System Design]**I am concerned about the design of the new units, but there are certainly people here who can speak in much -- with much more intelligence and greater detail about those issues, so I'll just leave it said that I'm concerned.

The issues that I want to address in a little detail are those relating to the security of the workforce and the implication to local business and economy in general. And let me preface the points that I have to make today with the assumption that the best way to judge what future behavior might be is to base it on what past behavior has been.

When I was high school -- I'll give my age away, but I can't claim 29 forever, I guess -- Units 1 and 2 were under construction. And on a fairly regular basis, STP sent representatives into our classrooms with promises of jobs, good jobs, and jobs that if we would go into particular supportive fields for the industry, we would be assured that we could work and live and retire right here in our home community.

And as Owen and D.C. referred to earlier, that hadn't been an option for my generation. We didn't have really good jobs here. You were pretty much a farmer, or you left and went to school and didn't come back.

So we were encouraged by that. And many of my friends and classmates and family members did go into those paths, and many of them did find careers with STP, just as STP is recruiting in the high school classrooms today and promising jobs to my kids and their generation. The same thing, history is repeating itself very much.

Other than extreme reductions in work -- reductions in force and some difficult work loads, tough jobs, and dedicated hard-working employees, many of our classmates, as I said, did find a career there. But things have changed since 1978, 1980, 1982 in that the economy has become much, much more globalized.

[#121 : Socioeconomics]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.

[#108 : Socioeconomics]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.

[#123 : Outside Scope-Security and terrorism]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.

But when an employee has to worry not about just their financial -- their credit, and, you know, their finances up to that point, when their entire career is constantly hanging in the balance, when they're constantly having to train companies that might come in an outsource their jobs, or alliances that might combine their job with others, how secure can that workforce be?

I think it's ludicrous to expect a little community like ours with, I think, a $3.3 billion tax base is equipped to deal with a multibillion dollar industry to protect itself from being totally hapless, and our destruction as new units are built and operated here.

It's ridiculous to think that we have the infrastructure to support such temporary growth. In 2005, when I was much more versed in what the management team of STP was made up, who made it up and so forth, five of the six senior managers of STP, the top six guys out there, who had decades invested in their career working near Wadsworth, were still driving 90-plus miles round trip from Lake Jackson. They weren't living in Matagorda County, they weren't promoting jobs in Matagorda County on that level.

[#124 : Socioeconomics]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.

None of us can know what changes the worldwide economy will hold in the next 50 years or so. No one building Units 1 and 2 30 years ago could have predicted things like deregulation and the birth of the information age, and the worldwide economy that followed. And more certainly, no one, not me, and not any of you, know what changes we're headed for as a county, as a country, or worldwide during the time frame we're discussing for construction and operation. No one knows the future. If we did, those who sat without protection at Compania Hill and watched behind sun glasses while atomic bombs were exploded wouldn't have done so. They would have known it was unsafe. But unfortunately hindsight is the only thing that's 20/20.

[#125 : Opposition-Licensing Action]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.

An NRG representative told me in 2005 that his -- their loyalty is to their shareholders, which is business. But basically if Matagorda County's demise makes their stocks more valuable, so be it.

I don't claim to have all the answers, and **[#126 : Socioeconomics]**I don't know how much of the workforce should be required to live locally, or what tax abatement should or shouldn't be given, or what financial benefit we should offer NRG and STP as they seek to expand here.

But I do believe, if we all sit down at the same table, and if all sides to the issue are allowed equal time to air their concerns, that we will find that we have much more common ground than we have things that we disagree on. We can argue many of the aspects of pro- or anti-nuclear until we're all blue in the face and not have answers.

[#127 : Socioeconomics]What we can do as a community is sit down at the table with the builders, and ensure that there is some kind of an agreement in writing, set in stone, guaranteeing this community will develop. Just because you're handed a glossy magazine saying, This is going to be wonderful, jobs are going to be here, blah, blah, blah, whatever, if you don't have a legally binding written agreement that will transfer ownership when and if NRG sells their portion of the plant out to another investment company, there's no guarantee that any of the jobs will be here. We hope they will, we think they will, but what's set in stone for this community?

So in closing, **[#128 : Opposition-Plant]**I'd like to say to my elected officials, I'm greatly concerned by your apparent willingness to turn a blind eye to all sides of this issue, except those sides that are spun by STP's massive public relations machine. Before you grant tax abatements and surrender the key to the city, remember back to what kind of neighbor they were immediately before these expansion plans came about. Remember how far they were willing to stray from the original promises made when Units 1 and 2 were built, when it benefitted their bottom line. Too much is at stake here to refuse to look beyond the rhetoric. Way too much. Have an open mind, educate yourself, use your conscience to make decisions that are well-thought out and that benefit your constituents.

[#129 : Socioeconomics]To STP owners and managers I'd like to say, no matter what kind of retain -- attract and retain policy you adopt, nothing quite says, Job well done, and creates a loyal, safe, dedicated workforce like job stability, which none of your employees currently have, with the possible exception of your upper management. And to the NRC I'd like to say, I don't believe our time spent here today is a whole lot more than free therapy. Your public has lost faith in your ability and desire to control the nuclear industry and the safety and sanctity for our community.

[#130 : Outside Scope-NRC Oversight]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. Thank you.

MR. CAMERON: Thank you very much.

(Applause.)

MR. CAMERON: Cameron? Cameron Payne, and then Charles Stillman.

Cameron Payne.

MR. PAYNE: Thank you.

Can you hear me in the back, back there all right?

MALE VOICE: Get closer.

MR. PAYNE: Raise your hand if you can hear me.

MALE VOICE: Get closer to the --

MR. PAYNE: Okay.

MALE VOICE: -- mike.

MR. PAYNE: Thank you. I beg your pardon?

MALE VOICE: Get closer to the mike.

MR. PAYNE: Okay. My name is Cameron Payne, and I don't belong to any organization. I'm just a private citizen. I live 65 miles from here. I've been here in Texas for 35 years, and I -- my first job when I got out of college was working as a designer for nuclear fallout shelters, calculating the contaminated plains.

I did that for six months full-time, and then later in my career, when I was working for Gulf Oil, I worked for a small group that monitored our subsidiary, General Atomics, which designed and manufactured about -- more than 50 nuclear reactors. These were research reactors, not power reactors.

I just wanted to let you know I had a little experience in this, but not anything aside from that and my personal interest in this field. I'm not an expert in nuclear power.

But there's several things that concern me. One, **[#131 : Health-Radiological]**I read a story on the front page of the *New York Times*two days ago, and it was about a man in Illinois, and he discovered, I'm not quite sure how, that when he went to his drinking water well, 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.

In fact, just to make sure there was no misunderstanding, I'm going to read you just the one sentence in the paper two days ago. 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.

[#132 : Outside Scope-Safety]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.

[#133 : Outside Scope-Safety]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.

[#134 : Alternatives-System Design]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. This bothers me.

[#135 : Alternatives-System Design]And then I learned today that this -- you know, I'm just going to say that Hitachi and General Electric have decided to form a strategic alliance. They announced this and joined together in building nuclear power plants around the world.

It's 80 percent in Japan, it's 80 percent owned by Hitachi, 20 percent by General Electric, and it's the reverse here in the United States. 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.

[#136 : Outside Scope-Safety]And then 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".

I suspect that there are a lot of these executives sitting right here that are being left in the dark as to what's going on at the higher levels. Thank you.

MR. CAMERON: Thank you. Thank you, Cameron.

(Applause.)

MR. CAMERON: Is Charles Stillman here? I just want to say that we do -- I'm going to enter another statement in the record from Venice Scheurich. And I don't know if Venice is still here to address us, but this is going into the record, her statement. And I also have another statement from the Sierra Club Coastal Bend group signed by Mina Williams that I'm also going to enter into the record. And these will also be considered as formal written comments by the NRC.

Dr. Hefner? This is Dr. James Hefner who's going to speak to us. And then we're going to go to Robert Singleton, I guess it's Pat Suger, I'm not sure I have that correct. But this is Dr. Hefner.

DR. HEFNER: Thank you. I'm the site doctor out at STP. I've been coming out here for 16 years. It's been a great experience, and I've enjoyed working with the folks out there. Their safety and welfare, of course, is my focus.

[#137 : Health-Radiological]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 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.

Ed has put together this handout that I wish you'd grab on the way out. It's a fact sheet by the NEI, and these are multiple studies, many studies. 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.It's been studied exhaustively. I'm convinced in my heart and soul that we can relax on this point.

[#138 : Health-Radiological]As far as locally, less than a year ago, right here in Matagorda County, two Rice 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.So we can't connect the dots on this. I just hope I contributed to finally putting this to bed.

You can ask me questions later if you wish. Thank you. These two handouts are available to you on the way out. Thanks.

(Applause.)

MR. CAMERON: Okay. Thank you, Dr. Hefner.

And this is Mr. Singleton?

MR. SINGLETON: Yes, sir.

Hello. My name is Robert Singleton. And **[#139 : Health-Radiological]**I just want to give you a website to start out with, to counter what the doctor just said. If you go to www.radiation.org, that's the website of the radiation and public health project, you'll find some statistics that are directly, directly in conflict with what he told you.

I live in Austin now, but I'm not unfamiliar with this part of Texas. My mother's family is all from Edna, and I spent many summers and Christmas vacations in Southeast Texas, and spent a lot of time fishing. So I know how to bait a hook, and more important, I know why to bait the -- why you bait a hook.

And **[#140 : Socioeconomics]**I just imagine somewhere under the sea right now there's a meeting going on discussing a new fishing project where little fish in three-piece suits are flapping their fins and say, We'll bring hundreds of new worms to the area. It's the same above as below I guess.

[#141 : Benefit-Cost Balance]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.

So we're seeing applications that didn't happen, and there is all of a sudden a spate of them. So we're in a unique spot here. If we can stop this first one, maybe we can keep other people from jumping onboard the boat and putting in new applications.

I just want to introduce myself so the NRC people -- I'm the guy who visits your event report site every day. That's me.

I heard a comment from behind me when we first came in saying, These protesters against nukes, they're never in favor of anything. What are they in favor of? **[#142 : Alternatives-Energy]**Well, let me just say it once again, so it's absolutely clear what we're in favor of. Conservation, renewables and energy efficiency. Let me say it again, conservation, renewables and energy efficiency. You can argue about whether or not these work, but you can't say that the anti-nuke people don't have answers. This is our answer. We're not just saying, No nukes. We're saying, Conservation, renewables and efficiency.

[#143 : Meteorology and Air Quality]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. **[#144 : Uranium Fuel Cycle]**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.

The main focus of this is supposed to be the environmental report, the environmental review. And what I noticed in looking at it, in my first cursory pass through it, is it's dealing with the nuclear industry at its best, which is not surprising since this section is probably the result of work by the STNP.

Incidentally, I insist on calling it the STNP instead of the STP. It was originally the STNP, and then they took the N out of the name to make it sound a little more benign. I insist on putting it back in and calling it the South Texas Nuclear Project so no one confuses it with, for example, the Allan Parsons Project. It's the South Texas Nuclear Project. This is a nuclear plant and taking the word nuclear out of the title doesn't change that.

[#145 : Accidents-Severe]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.

[#146 : Health-Radiological]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.

[#147 : Outside Scope-Security and terrorism]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.

[#148 : Uranium Fuel Cycle]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.

Think about what happens in 10,000 years. There's no government, no culture, no language currently spoken on earth that's lasted 10,000 years. And yet we're supposed to believe that the Department of Energy is going to last that long, that they're going to be able to take the nuclear waste that we've already produced and keep it safe for 10,000 years.

Agriculture and the domestication of livestock hasn't been around for 10,000 years. And yet the government has the hubris to say, We can keep you and your grandchildren and your great-grandchildren safe for the next 10,000 years from the waste that we produce, in what is, after all, only a stop gap measure.

[#149 : Uranium Fuel Cycle]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?

MR. CAMERON: Mr. Singleton, can I ask you to --

MR. SINGLETON: All right.

MR. CAMERON: -- wrap up?

MR. SINGLETON: I'll wrap up here then.

MR. CAMERON: Thank you very much for those comments.

(Applause.)

MR. CAMERON: Mr. Sooger?

(No response.)

MR. CAMERON: Mina Williams?

(No response.)

MR. CAMERON: A.C. Conrad? Mr. Conrad.

MR. CONRAD: All right. Today my bona fides are I was born in Uvalde, I grew up in San Antonio, I live in Houston, I have a place in Marfa, **[#150 : Hydrology-Surface Water]**

my 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.

[#151 : Health-Radiological]If you look at this map, it's an interesting map. I've been through a lot of maps in the last few days. This is Matagorda County here, there's the Colorado, and she's right up here someplace. So we'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. People from M.D. Anderson say, You got cancer. I'm from Wharton. Oh, you know, okay, we know why, yes, all right. But they don't say why, but they just say that.

[#152 : Alternatives-System Design]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.

If you're against this -- I think it's idea, so if you're against it and think about it, you can win, because 10 years ago, in Sierra Blanca, Texas, there was a fight that culminated in some state administrative law hearings where people worked for probably 10 or 15 years to not have a nuclear low-level radiation waste depository in Sierra Blanca, Texas.

So you can win if you think it's a bad idea. That was a bad idea, so it was pretty easy to beat it. All -- it took them 15 years, took them half a million dollars, the state spent $5 million, they won. So if you think this is a bad idea, don't be shy, don't be embarrassed. I mean, if it's a bad idea, it's a bad idea. Just go after it. I guess don't give up.

And also, **[#153 : Hydrology-Surface Water]**I heard earlier today all this enthusiasm for the STPS -- STNP -- when I was in Houston growing up in graduate school 20 years ago, it was STNP then. If you look at maps, very few maps actually have the cooling lake on it. You should ask that -- it's a little hard to find the cooling lake. I mean everybody knows where it is, you can look on Google, so ask why all the maps that you buy, except for really expensive, fancy maps, don't have your pride and joy on it? Because it ought to be there because it's a big deal. So thanks.

MR. CAMERON: Thank you very much, Mr. Conrad.

(Applause.)

MR. CAMERON: Is Zu Duc here?

(No response.)

MR. CAMERON: How about Georgia Rice-Harris? Georgia? And then we're going to go to Ron Paris, Eleanor Schwank, and Maria Hamilton. And this is Georgia Rice-Harris coming up to join us.

You okay?

MS. RICE-HARRIS: Got it.

MR. CAMERON: All right.

MS. RICE-HARRIS: Thank you.

MR. CAMERON: There you are. Let's just make sure people can hear you.

MS. RICE-HARRIS: Okay. Can you hear me? Okay.

I want to thank all of you that came here today to help inform us. I'll try to be real brief, but **[#154 : Socioeconomics]**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.

And we came through it, there was lots of controversy then, as there is now. And I think that's good because it does bring out things that may not have been addressed at that time.

In the *Tribune* December 30, last month, there was -- they have a little history thing in the Sunday paper, and it showed a picture of the Colorado River and some people -- some peers had been washed out.

[#155 : Outside Scope-Safety]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.

[#156 : Support-Licensing Action]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. How many people have been killed in refineries blowing up? I mean, something happens somewhere all the time. Thank you. MR. CAMERON: Okay. Thank you, Georgia. Thank you very much.

(Applause.)

MR. CAMERON: Is Ron Paris here?

MALE VOICE: No.

FEMALE VOICE: He left.

MR. CAMERON: Okay. How about Eleanor -- Eleanor Schwank? Oh, great. Hi, Eleanor. And then we have Maria Hamilton.

MS. SCHWANK: Good afternoon. My name is Eleanor Schwank, and I am a private citizen. I am a registered nurse with a baccalaureate degree. I graduated in 1978, and I've been practicing emergency medicine ever since.

[#157 : Alternatives-Energy]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.

I have a concern that our monies are being directed into something that is seducing our citizenry. I don't know if any of you know anything about Maslow's hierarchy of needs, but for humans to survive, Maslow developed a hierarchy of needs, which is a pyramid.

The base of the pyramid is our most basic need, and that is water, air, warmth, and sex. Sex is one of our most basic needs. If we can't breathe, obviously we're not going to live. If we can't maintain our body temperature we'll die. If we don't have water we're not going to live. And sex because it ensures the propagation of the species.

[#158 : Hydrology-Surface Water]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.

[#159 : Socioeconomics]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.

[#160 : Opposition-Licensing Action]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. Thank you.

(Applause.)

MR. CAMERON: Okay. Thank you, Eleanor.

We have Maria Hamilton and Mark McBurnett, and Joe Shepherd as our last speakers. Is --

Thank you very much, Eleanor.

MS. SCHWANK: You're welcome.

MR. CAMERON: Maria?

(No response.)

MR. CAMERON: Let's go to Mark, Mark McBurnett and then to Joe Shepherd.

MR. McBURNETT: All right. Thank you. It's a pleasure to be here this afternoon and have a chance to talk about the new units at the South Texas Project.

I'm Mark McBurnett. I'm Vice President of Oversight and Regulatory Affairs at the South Texas Project. And I'm directly responsible for submittal of the application to the NRC, as well as oversight of the project, ensuring that things are done absolutely correctly.

There's a couple of things I'd like to talk about this afternoon. There were many, many topics brought up, more than what we have time here to go through the rest of the afternoon. I'd like to go through every one of them point by point extensively, however, in the interest of where we're at in time, I'll stop with that.

[#161 : Alternatives-System Design]I do want to tell the ABWR story. There's been a lot of questions about the Toshiba/GE/Hitachi/Japanese. 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.

[#162 : Outside Scope-Safety]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.

Now, yes, Japan is in the process and Tokyo Electric Power is in the process of addressing those units in great detail to make sure they're safe to put back in operation. That's a whole another story. But the point of the matter is, those plants safely responded to the earthquake as designed.

I do want to talk a little about need to power. We've had a lot of discussion on need for power. And by the way, I'm an engineer, my training is engineering, I'm a professional engineer, I've been in the electric power business for 30-plus years now.

[#163 : Need for Power]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.

[#164 : Alternatives-Energy]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.

[#165 : Uranium Fuel Cycle]There is -- let's see, just a couple of things -- waste, nuclear waste, 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.

[#166 : Hydrology-Surface Water]And I think -- oh, yes, water, I want to talk about water real quick. And this is just to explain cooling reservoirs. 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.

That's all the statements I have. I wanted to introduce Mr. Shepherd.

(Applause.)

MR. SHEPHERD: I want to thank those of you who've made it to this point. I appreciate you being here.

I'm Joe Shepherd. I'm the President and Chief Executive Officer of STP, Nuclear Operating Company. I'm not afraid to say that word. That's the name of our company.

I would like first thank the NRC for conducting this meeting. I'd like to also thank all the other speakers, our neighbors, or local officials, and our visitors for their comments. We welcome the dialogue. We think that that's important in this whole process.

[#167 : Process-ESP-COL]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.

I am a native Texan. I grew up within spitting distance of the chemical plants in Texas City, Texas. I think that has given me a unique perspective on the environment, and what I feel is important in protecting the environment.

You know, we're granted a license to operate the two units that we have in operation now by the laws that are passed by Congress, and the licenses that are granted by the NRC. But we understand that the granting of those licenses brings a special trust, and that we're responsible to the citizens of Texas and of Matagorda County.

[#168 : Outside Scope-Safety]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.

[#169 : Socioeconomics]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. And we understand implicitly that safe, reliable operation of Units 1 and 2 are the enablers for any new plant construction. And that redoubles our focus on safety.

[#170 : Alternatives-Energy]I'd just like to amply one thing that Mark said. We are not against renewables, solar, wind, conservation, efficiency. We teach our people to look carefully at decisions, and to make a decision that is either this or that is often what we call a sucker's choice.

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.

There's been a lot of talk about efficiency. We believe in efficiency as well. In 19 -- well, in 2006 and -7, we replaced our low pressure turbines in Units 1 and 2. Without changing the reactor power, we added 140 megawatts onto the grid. That's the equivalent of a combined cycle plant. So we believe in all this. We think that it's all necessary to be able to have an impact going forward.

[#171 : Alternatives-System Design]Mark talked about the ABWRs. Their 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.

There were some concerns about the seismic event that occurred in Japan. I have personally toured those plants after the earthquake. I've crawled under the reactor vessel, I've been through the spent fuel pool, et cetera. I'll be glad to talk to anybody about how those plants did in the seismic events that occurred in Japan.

[#172 : Alternatives-System Design]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.

[#153 : Socioeconomics]There were a lot of discussions previously about STP and the community. We strive to be a good corporate citizen in Matagorda County, and we're pleased with the support and the partnership that we have with the county and the surrounding areas. 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.

[#174 : Socioeconomics]Already, as D.C. Dunham talked about, 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.

[#175 : Socioeconomics]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.

Kind of in summary, our vision at South Texas is that we improve lives through excellence and energy generation. We feel that we improve the lives of Texans by providing safe, reliable, efficient electricity to power the Texas economy.

We believe we improve the lives of the local community through our involvement with the community, through the tax base we provide, through the investment we provide in the community. And we feel that we improve the lives of our employees by providing an outstanding place to work with good wages and good benefits.

We intend to be here for the next 60 years, and we look forward to the construction of Units 3 and 4. Thank your for this opportunity.

(Applause.)

MR. CAMERON: Okay. Thank you very much. Someone gave us a card late to speak, Stephen Kale, or Kall? I can give you a couple of minutes, Stephen.

MR. KALE: I can wait till tonight if you prefer.

MR. CAMERON: Oh, you're coming tonight?

MR. KALE: Yes.

MR. CAMERON: Oh, good. Well, then let's hear you tonight. We heard -- you had a great question earlier today. So we'll hear you tonight. Thank you, Stephen.

I just would like to thank you for many great comments, for following the ground rules. And I'm going to turn it over to Nilesh to just close the meeting out for us.

MR. CHOKSHI: Well, I think we started this meeting in asking for you input, and I'd really like to say that we heard a number of topics on those issues, and we have written comments as well as your verbal comments, and we will do our best to consider all of these comments. And thanks once again. And I anticipate that the evening we'll have similar participation. Thank you.

(Whereupon, at 4:51 p.m., the meeting was concluded.)

STP-COL3&4-SC-00008 (Meeting Transcript) [ML080950504]

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Public Meeting: Evening Session
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Location: Bay City, Texas
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UNITED STATES OF AMERICA
NUCLEAR REGULATORY COMMISSION
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PUBLIC SCOPING MEETING
SOUTH TEXAS PROJECT UNITS 3 & 4
COMBINED LICENSE APPLICATION
+ + + + +
Tuesday, February 5, 2008
+ + + + +
Auditorium
Bay City Civic Center
201 7th Street
Bay City, Texas
7:00 p.m.
PANEL MEMBERS:
FRANCIS X. "CHIP" CAMERON, Facilitator
JIM BIGGINS, Office of General Counsel
NILESH CHOKSHI, Deputy Director, NRC
GEORGE WUNDER, Sr. Project Manager
PAUL KALLAN, Environmental Project Manager
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PROCEEDINGS

MR. CAMERON: Good evening everyone. My name is Chip Cameron, and just like to welcome you to the public meeting tonight. I work for the Nuclear Regulatory Commission, the NRC.

Our topic tonight is the NRC's environmental review process for evaluating the license application that we received from the South Texas Nuclear Operating Company to build and operate two new nuclear reactors at the South Texas site.

And it's my pleasure to serve as your facilitator tonight, and in that role I'll try to help all of you to have a productive meeting.

And I just want to go over a couple of things about meeting process before we get to the substance of our discussions. I want to tell you about the format of the meeting and tell you a little bit about the ground rules -- simple ground rules so that we can have a good meeting tonight and just introduce the NRC speakers who are going to talk to you briefly.

You know, I think I'm going to have to take this --

MALE VOICE: You think it's that?

MR. CAMERON: Yes, because it wasn't doing it this afternoon, so -- I'm sorry about that.

(Taking off lapel microphone.)

MR. CAMERON: Okay. And -- all right. In terms of the format for tonight's meeting, we're going to start on giving you a little bit of information about the NRC's evaluation process -- what we look at when we have one of these license applications to evaluate.

And we're going to have some brief NRC presentations on that for you, and then we'll go on to you for some questions about the process to make sure that it's clear for you.

And then we're going to get into the second part of the meeting, which is for us to listen to all of you -- your advice and recommendations on our process. And we'll ask you to come up here -- those of you who have signed up to speak -- and to tell us what your views are.

And just as the NRC staff is going to tell you in more detail this is called a scoping meeting. And that's a term that's used with preparation of an environmental statement. And, very simply put, it's for the NRC to hear from people on what the scope of the environmental impact statement should -- what issues should the NRC look at in preparing that environmental impact statement.

So the focus is on comments related to scoping, but we realize that there are a broader set of concerns with anything like this than environmental. And we always want to listen to public concerns, so we're going to be glad to hear what your concerns -- your issues are, even though they ultimately might not fall within the scope of the environmental review.

Now, during this second part of the meeting where we're listening to you we're there to listen. We're not there to respond or rebut what you say in any way unless there may be some instances where there's been some new information in terms of what the NRC has done on a particular issue that I'll ask the staff to bring to your attention if we get to something like that.

In terms of the ground rules, when we get to the question period I would ask that you just hold your questions until all of the NRC speakers have done with their presentation. Then we'll go on to -- for questions. If you have a question just signal me and I'll bring you this cordless microphone. Introduce yourself and keep it to a question instead of making a comment at that time. If you want to comment come up during the second part of the meeting to make a comment.

I would that only one person speak at a time so that we can give our full attention to whomever has the microphone. And it will also allow our stenographer over here to get a clean transcript. And this is Leslie Berridge who is doing our transcribing tonight. That transcript for this meeting will be available to the public to anyone who wants to get a copy of that.

We're also taking written comments. The NRC staff will be telling you about that. But I want to emphasize any comments that you give tonight -- they're on the record. They'll count. They'll have as much weight as a written comment.

I'd ask you to try to be concise. I think we have a number of people who want to talk tonight, so I want to make sure that they all get a chance to do so. So when we get to the second part of the meeting where we're listening to you, if you could just try to follow a three- to five-minute guideline on your remarks -- I don't if that's too -- to get through the evening. And usually three to five minutes is enough time to summarize what you have to say. And if you want to amplify you can do that through written comments.

And, finally, although one of the hallmarks and pleasures of working in Texas has been the fact that everybody, no matter what their viewpoints are, is always very, very courteous. There's a good streak in courtesy really and I know that I appreciate it. And

it's really productive. I usually say, you know, let's be courteous tonight because you're going to hear remarks -- views that you don't agree with, and just let's respect the person.

In terms of the NRC speakers, we have Nilesh Chokshi, who is right here. Nilesh is our deputy division director of the -- is it Division of Environmental Review?

MR. CHOKSHI: Site and Environment.

MR. CAMERON: Pardon me?

MR. CHOKSHI: Site and Environment.

MR. CAMERON: Site and Environment. Nilesh is our top manager here tonight, and he's going to lead off and tell you a little bit about the NRC and what we're trying to accomplish tonight.

Then we're going to go to George Wunder, who's the project manager for the review of the safety aspects of the license application that we've received from South Texas. And he's also in our office of new reactors, which is where Nilesh is.

Our third speaker is going to get to the heart of the matter, the environmental review. This is Paul Kallan right here, who is the project manager to the environmental review. And he's also in the office of new reactors. In fact, you are in Nilesh's division, which Burton right here -- William Burton is the branch chief of that environmental branch.

And I would just thank you all for being here. And let's have a good meeting. And, Nilesh?

MR. CHOKSHI: Thank you, Chip. Good evening. Can you hear me in the back of the room? No?

(Pause.)

MR. CHOKSHI: Good evening. Is it better? Okay.

Now, my name is Nilesh Chokshi. I'm deputy director in the Division of Site and Environmental Reviews in the NRC?s Office of New Reactors.

First, let me begin by welcoming you and thanking you all for taking time to really help to fulfill one of our major responsibilities related to the environmental review under the National Environmental Policy Act.

I also see that -- thank you -- some of you are staying for the second session. And probably my remarks are a repetition, but, but I thank you for staying and participating in this important gathering. I know that you are taking time out of your personal schedule to meet with us and share your insights and views about the South Texas Project.

Hopefully during the open house you had a chance to discuss with many of the NRC staff members and get some better understanding over why we are here today and what we are trying to accomplish. But, anyway, this is the session where we're going to expand on what we are here for, and we look forward to your participation.

What we are going to do is present some information on the application for the two new power reactors to be constructed and operated at the South Texas Project site. And we're going to -- our focus is going to be on the environmental review aspects of the application.

It is in my division, and my staff is responsible for managing the environmental review and that we have to conduct before we can make a decision about the application.

During the course of review, we interact quite a bit with our safety counterparts, and safety and environmental reviews go hand in hand. And Mr. George Wunder, who is the project manager for safety -- he will also give a prospective on the overall review process.

So I think, as Mr. Cameron already mentioned about the meeting, our purpose is to basically get input on our environmental review process. But what I want to do is take a few minutes and put this meeting in the context of the earlier meeting -- public outreach meeting which was held in June, and that was before the applications were filed with the NRC.

And in that meeting in June -- some of you may have participated in the meeting -- we shared information on the various steps in the licensing process -- the purpose was to explain the licensing process. We also informed you about the opportunities that you would have to observe or participate in the work of the NRC if we were to receive an application to construct and operate new reactors.

During that meeting we also identified several major tracks of review, which include safety review, inspection activities, formal hearings, as well as the environmental review.

In June we also wanted to share with you information about what combined construction permit and operating licenses, COL. Shortly you will hear me and other NRC people talk about COL or COLA, which is the Combined Operating License Application.

And in that meeting and in this meeting you will hear again and again that how much your participation is important in these proceedings. You know, the fact is that this is your home, this is your community, and the proposed project, if NRC and all of the other permitting agencies approve, will have more of an impact on you, people who are in the close vicinity of the plant, than anybody else.

Now, I think since that meeting -- outreach meeting in June, as you know, the NRC did receive an application for a combined construction permit and operating license for the South Texas Project in September 2007.

And after we determined that the application was acceptable, we now are initiating the review of the application. I want to make sure, because I think after the first session apparently probably there was some misunderstanding. We are accepting the

application for review. That is not same as granting a combined operating license. This is just the beginning of the process.

So we have now initiated our review of the application. And we are at very early stages. And much of our focus -- and you will hear in more detail about our review process, but our focus right now is on gathering information.

And as shown in these first three bullets on this chart, one of the purposes of this two-day meeting is go over that earlier information we presented in June just to review the overall context of the review.

But the primary purpose of two-days meeting is to give you opportunity to share with us your comments and thoughts on what we should consider in the environmental review when we develop the NRC's environmental impact statement on the South Texas combined operating license application.

This is a scoping meeting, and it's a part of a formal scoping process where we decide what matters need to be addressed and that what we should consider when we undertake the review. So I think this is very vital that those of you who live close to the proposed plant and have a better understanding of your local environment will give your insights.

We need to better appreciate those environmental values and insights you have, and we really want to hear about the issues you think important to you. So we are going to be, as Mr. Cameron mentioned, primarily in the listening mode in the later part of the process.

Now, you are also going to hear from project managers-- that we already have a well-defined review process -- and you will hear detail about this. And our review team is staffed with nationally and internationally recognized experts in all of the environmental disciplines.

In fact, many of NRC environmental staff, and our principal contractor, Pacific Northwest National Lab, staff is here, and they're also going to listen to your concerns and views.

Now, I want to make sure that you understand that this is not the last opportunity for you to interact on environmental issues. There will be other opportunities as we conduct review and develop environmental impact statement. And I think later Mr. Kallan will go over some of the more details on that aspect.

Now, before I hand the mike over to the project managers to give more detailed information, I wanted to go over who we are, what we do, and who we interact with. I know that this was probably covered in detail in the June meeting, but I think it's worth going over so you understand our role.

The Nuclear Regulatory Commission was created in 1974 to regulate, among other things, the civilian use of nuclear power, to ensure the health and safety of public, to promote the common defense and security, and to protect the environment.

I want to -- I would like to emphasize that we are not part of the Department of Energy or any other agencies that promote the use of nuclear power. We are here to regulate and grant license.

We are an independent regulatory agency headed by five commissioners, all appointed by the President and confirmed by the Senate. And unlike cabinet secretaries and other political appointees, the NRC commissioners do not change when a new president is elected. They each serve five year terms, and there's always a mix of both Republicans and Democrats.

The Commission is supported by a staff of technical and regulatory experts, roughly around 3,000 people. And as an agency, since we came into existence over 30 years, we have experience in licensing and regulating nuclear power plants and other uses of nuclear materials. There are currently 104 operating reactors in the country.

Now, a couple of points about our licensing process, and what I want to emphasize is the aspect that this is a very open public process to the greatest extent possible. The process is also designed so that people who have a stake in the proposed action are given a chance to participate and to be heard.

On this chart I have listed the participants in the licensing process in three categories. I already mentioned the Commissioners and the staff, but under the heading of NRC you will also see two other bodies listed, hearing boards and the Advisory Committee on Reactor Safeguards. I think in a few minutes you will hear a little bit more about both the hearing process and the Advisory Committee on Reactor Safeguards.

Another participant in the process is obviously the applicant and the company that wants to build the plant and operate the plant. And the final group of participants in this process is the group of people we call stakeholders. And that is you, the residents and business operators of the community.

And also included in this hearing are various public groups -- public interest groups, as well as the government of the State of Texas and your own county and city governments. I think when you hear about the environmental review you see that a number of variety of different agencies that are involved in the reviews.

So this is a little background, and to try to set the stage for this meeting. Let me thank you again for allowing us to come to you, come into your community, and for you taking this effort to meet with us and share your views on the potential environmental issues associated with this project.

Now, we have a long way to go before the NRC completes its review of the application -- is ready to make a decision on the proposal. We're talking about one aspect of the review today.

With this, what I want to do -- I want to turn it over to Mr. George Wunder, our safety project manager for the South Texas, and he will give you more details on the application and the overall aspects of the review. George?

MR. WUNDER: Thank you, Nilesh. It's been a long couple of days, so I hope you'll all bear with me as I make my way through these slides. I've only got a few slides that I want to go over with you tonight trying to give you a little bit of a background on what the COLA is.

As Nilesh said, I'm George Wunder, and I'm the safety project manager with the Office of New Reactors.

So what is a combined license? Well, a combined license -- I'm not doing too well with this, am I? A combined license is permission from the Nuclear Regulatory Commission to build and operate a reactor of a specific design in a specific location subject to specific rules and regulations. In this case South Texas is applying to build two general electric advanced oil and water reactors at their site in Wadsworth.

As far as who get an -- or who can be issued a combined license, it has to be an entity that is qualified both financially and technically -- in this case, South Texas Project Nuclear Operating Company.

And as far as when -- the application was received in September of last year. And we did a two-month review and at the end of November of 2007 we officially accepted the application.

Now, the NRC has a pretty big job to do when it comes to reviewing a combined license application. As Nilesh indicated, our primary focus as an agency is on safety. And one of the ways in which we ensure safety is by making sure that everything is done in accordance with the appropriate laws and regulations.

In this case, the law of concern is the Atomic Energy Act, and the regulations are those contained in Title 10 of the Code of Federal Regulations. So these are the standards by which we are going to be evaluating the application that South Texas submitted.

We're also tasked with performing an environmental review under the National Environmental Policy Act. And Paul Kallan, the environmental P.M., will talk more about that in just a bit.

One of our goals is throughout the review to make the best possible decisions with the best information at every moment and to document these decisions in a clear and unambiguous way. And this is going toward our goal of trying to make sure that the entire process is as open as possible and that anyone who is interested can understand not only what decisions we are making but why we are making those decisions.

Okay. Now, let's take a little look at the scope of the review -- what is it that we're actually going to be looking at. Well, first of all, we're going to look at the design of the plant. In this case, much of that work was already done about ten years ago. The ABWR is what we call a certified design. And what that means is that we've already reviewed and approved the basic design of the plant.

Now, there are going to be some differences between the plant as built at South Texas and the design that we certified ten years. And this can be for a variety of reasons. It can be the applicant wants to use a new technology -- something that wasn't in existence

when we did our certification. Or it can be because of specific site -- site specific needs. Any deviation from the approved design is reviewed and approved by our staff.

One of the other things we're going to look at is we're going to look at the suitability of the site itself. And this will include things like looking at the suitability of the soil to support the structures that are going to be built. We're going to look at the seismic history of the area. We're going to look at the potential for all sorts of natural problems, like flooding or tornadoes and hurricanes. All of this -- all of these things are going to be taken into account on our safety evaluation chapter on site characteristics.

We're going to look at the environmental impact of the project. Paul's going to tell you more about that in a minute.

We're going to look at the way they want to put the plant together -- look at the materials they want to use and the way they're going to arrange the components. We have standards on quality assurance, and we're going to have inspections going on to make sure that these standards are upheld.

There's going to be an army of construction workers and heavy equipment coming down to the site. So, obviously, security is going to be a concern -- and we're going to look at security considerations, both for the new plants under construction and for the operating units.

We're going to look at emergency preparedness. And in consultation with the Federal Emergency Management Agency we're going to evaluate the South Texas Emergency Preparedness Plan -- Matagorda County Emergency Preparedness Plan. And we've got the emergency preparedness expert with us this evening to handle any questions that you might have in that area.

Finally, we're going to look at personnel training so that we can make sure that anyone who is working on something dealing with the South Texas Reactor Project has been trained and qualified to do that job.

Now, Nilesh indicated that we very much value your participation and we want you to have all the information that you want to have. And a good place to get that is in our electronic public reading room. You'll find most documents pertinent to the application there.

You'll also find meeting notices. Now, most of the meetings that we're going to be having with South Texas are public meetings. They're open for you to attend and to observe. We understand that coming to our meetings might not be a priority or might not be a practicality for you, so also posted on the website we will -- we'll have meeting summaries where we provide a brief synopsis of what transpired in the meetings and provide any handouts or material that was distributed.

Another way that you can participate -- and this comes a little bit later on in the review -- is when the application is presented -- or, rather, when the staff safety evaluation is presented to the Advisory Committee on Reactor Safeguards.

Now, the Advisory Committee on Reactor Safeguards is an independent statutory body. It reports directly to the Commission. And what we do as a staff, as it evaluates the application, prepares what's called a safety evaluation report.

And when we have this safety evaluation report prepared to a large degree we present it to the advisory committee and we receive their comments on it. They comment on it. We take their feedback, and their feedback is also provided to the Commission.

Now, the presentation in the meeting with the Advisory Committee on Reactor Safeguards is a public forum, and members of the public can apply to speak at this meeting and present any comments or concerns that they have directly to the advisory committee. Okay?

And, finally, what I want to talk about is the hearing process. After docketing the application the staff on December 27, 2007, issued a notice in the Federal Register which offered an opportunity for the public to participate in the hearing as a party. And this is a process called intervention.

In order to intervene a petitioner needs to file a petition within 60 days of the Federal Register notice. That period is going to expire on February 25, 2008.

Okay. This is a slide that just kind of shows a flowchart of the overall process that we're describing here briefly tonight. We received the application back in June. We had a pre-application meeting down here. We've now received the application. And, as you can see, the review process splits, and we've got the environmental review, which Paul will discuss, and then we've got the safety review. And then these things all come together neatly at the end and result in a -- the Commission rendering a licensing decision on the project.

But nothing really comes together all that neatly in the real world. As I noted, we accepted the application for docketing on November 29, 2007. In a letter dated January 10, 2008, South Texas Project informed us they were having challenges in arranging for some of the design support that they will need for furthering the project. And as a result of that they asked that we put parts of the application -- a review of parts of the safety part of the application on hold.

In a letter dated January 30, 2008, we informed South Texas that we were going to put the majority of the safety review on hold. This is not the entire safety review. We're continuing with parts of the safety review dealing with site characteristics. And this cannot be mistaken for a lack of acceptance of the application. I want to be very clear about that.

We reviewed the application -- we accepted it for docketing. All this means is that -- as we go forward in our review we will find the necessity to have lots of interaction with the applicant -- a lot of question and answer going on. And they were not ready at this point to support our full evaluation. So based on our own workloads and other considerations we decided to put a majority of the safety evaluation on hold temporarily.

The environmental review will continue. And, with that, I'd like to introduce the environmental P.M. Paul, come on up.

MR. KALLAN: Thank you, George. Thank you for coming out tonight to understand our process. My name is Paul Kallan, and I'm with the Office of New Reactors. I'm also the environmental project manager.

You may be wondering why there's two project managers. One is a safety project manager and other environmental. The answer is that the NRC's mission is to ensure the safety of the facility, and at the same time to protect the environment.

So I'm here today to talk to you a little bit about the National Environmental Policy Act. The goal of the National Environmental Policy Act is to create an environment where man and the environment can live in productive harmony.

The National Environmental Policy Act also requires the NRC to do an independent study -- or an independent evaluation. We use a systematic approach to our environmental reviews.

The environmental impact statement is required for major federal actions that may significantly affect the quality of the human environment. Issuing a combined license such as the one at this project would be a federal -- a major federal action.

This slide illustrates the environmental review process. There are many steps to this process, and we would like the public to participate in this process. For that, we have the public scoping meeting where we try to explain our process, and at the same time get your comments.

We have a large team of technical reviewers for the project. We accepted the application in September 2007. Our next step is to do a site audit, which we are conducting actually this week. We check to see what was described in the application, as well as we try to identify issues that are not in the application. This is our own independent evaluation.

Also, we schedule a public scoping meeting, such as the one tonight, during the week of the site audit. Along with the public participation we also get comments from federal, state, tribal, and local agencies.

We take all this information, analyze it, and draft the environmental impact statement. Once we have that we issue it and ask for public comments.

Next we have -- we write the final impact statement based on the fact that we look at the draft environmental impact statement and incorporate additional concerns. The NRC has a hearing, and after the hearing is completed the agency makes a decision.

So you may be wondering what is scoping. Scoping is participation of diverse groups. This is necessary for full consideration of the potential environmental impacts of a proposed action and its alternatives.

By discussing and informing you, the public, we are able to reduce misunderstandings, build relationships, educate the public, decision makers, and avoid potential conflicts.

For example, in an earlier scoping meeting at Vogtle -- Plant Vogtle -- a member of the public asked what the U.S. Army Corps of Engineers was doing to manage the flow of the Savannah River. Based on this comment we arranged a meeting with the Army Corps of Engineers to discuss issues such as drought levels in the Savannah River.

So information identified in the scoping process will be evaluated and considered in the environmental review. The public can give comments until February 18, 2008.

So what is -- basically how does the NRC do an independent evaluation? We don't only look at the application. We have our own observation which we do by going to the site and conducting a site audit. We get public comments, such as at this meeting. And the reason we want public comments is because you live here and you know best of what the environmental impacts may be with regards to this project. We talk to social services and also we talk -- we try to incorporate socio-economics and environmental justice.

We also talk to federal agencies such as EPA, FEMA, Army Corps of Engineers, Fish and Wildlife, to name a few. We have a long list of other agencies that we contact to get their input. We also talk to state, local, tribal agencies to get their knowledge on the local conditions.

This slide basically shows a range of environmental review that we do. We have a large team of experts in the various fields, such as socio-economics, environmental justice, aquatic and terrestrial ecology, water quality, hydrology, land use, radiation, atmospheric science. We also look at transportation of radioactive material and decommissioning.

The staff has begun its review of the environmental report. A schedule helps the staff organize its review and use its resources effectively. Normally staff would issue a draft environmental impact statement in 18 months. However, as part of this review the staff has identified additional information necessary to determine a detailed scheduled. While the schedule is uncertain we will be giving you updates, and these can be -- you can get them on the NRC website.

Here are some milestones of the environmental review. Scoping comments can be received until February 18, 2008. The public can petition to intervene through February 25, 2008.

We will still need to determine the draft environmental impact statement public meeting, draft environmental impact statement the final impact statement -- the dates on those. As we progress we'll give you the dates. The review schedule will be also available on the NRC website, and we've provided the website on the bottom of the slide.

We encourage public participation during the environmental review. It's important as part of our process. The public can make comments during the public scoping meeting, such as the one tonight, and the draft environmental impact comment period.

Throughout our environmental process we hold public meetings to inform the public of our process. The next public meeting will be the draft environmental impact statement meeting. The NRC meeting is another way for the public to participate. The public can file petitions to intervene until February 25, 2008.

I would like to point out that the Commission recently passed a rule for e-filing which requires a digital certificate. The digital certificate takes about a day, so if interested parties will want to review the instructions, it's on the NRC website and on the Notice of Intent. The hearing covers both the safety and environmental issues.

We welcome your comments tonight. You can provide them in writing, as well as you can provide them by mail to Chief Rules and Directives Branch, Division of Administration Services, Mail Stop TSD59, U.S. Nuclear Regulatory Commission, Washington, DC, 20555. Or you can e-mail us at STP_COL@NRC.gov. Of if you'd like you can provide those comments in person at 11545 Rockville Pike, Rockville, Maryland, 20852.

Here's a list of NRC contacts. Kindly contact George Wunder for any safety issues that you might have. For environmental issues please contact me. And, finally, a list of acronyms that may help you with reviewing the environmental report. I'll turn it over to Chip.

MR. CAMERON: Great. Thank you very much. We have time for questions about the process before we go on. Come up and please introduce yourself.

MR. GUNTER: My name is Paul Gunter. I'm with Beyond Nuclear, and we're out of Takoma Park, Maryland. And we've been watching the NRC oversight process and the licensing process. And I have a particular question with regard to the digital certification process. Could you elaborate a little bit more on that for us?

MR. CAMERON: Thanks, Paul. Do you under -- do we understand what the digital -- is this the e-filing?

MR. GUNTER: Yes.

MR. CAMERON: Okay. Good.

MR. BIGGINS: Thank you, Chip.

MR. CAMERON: Introduce yourself.

MR. BIGGINS: Right. My name is Jim Biggins. I'm with the Office of General Counsel at the NRC. And the Commission recently passed a rule requiring e-filing. You can apply for an exception, but if you intend to e-file, it requires a digital certificate in order to sign documents digitally before you file them with the NRC.

And that process to obtain the digital certificate typically requires contacting the NRC. The instructions are on the website regarding how to do that and how to obtain the digital certificate. And those instructions -- would probably be best to review those on the website or in the Notice of Intent that was filed with the Federal Register for this application.

MR. GUNTER: Could I ask a follow up real quick? I guess just to cut to the chase, does this require additional software on the part of the intervener?

MR. BIGGINS: I believe there is a plug-in for your web browser that's necessary, which is available on the website that contains the instructions for how to install it and that sort of thing, yes.

MR. CAMERON: And if someone is going to intervene, is there a certain time limit that they have to pay attention to to notify the Secretary of the Commission that they are going to do e-filing that's over and above the time period for filing that intervention?

MR. BIGGINS: Well, the time period can be sensitive in regards to you have to have the certificate before you can e-file. And in order to get the certificate, like I said, you have to contact the NRC. So, you know, when it comes down to the deadline to file your intervention you can't wait until the day that you intend to file to get the certificate. That was our point for pointing it out in the slides.

MR. CAMERON: Okay. Thanks, Jim. Yes?

MALE VOICE: Is the e-certificate tied to the computer or to the browser? In other words, if you get the certificate and you're not at home can you -- is it tied to your browser on your computer -- the cookie?

MR. BIGGINS: It's not a cookie, sir. But I believe it is tied to your computer, but may be imported to other computers. It is your certificate and identifies you as the author of the document.

MALE VOICE: So you have to carry that certificate. If you get caught someplace else with another computer, you have to bring that certificate with that. That's the final one that you're going to use to --

MR. BIGGINS: I'm not a computer expert, but I believe that's correct.

MALE VOICE: So that issue's on the website explained.

MR. BIGGINS: It is explained on the website, yes.

MR. CAMERON: And I think that's an important point for everybody. These types of questions should be clearly answered on the website, so if you go to the NRC website, there is a link to the e-filing rule and how you do that.

MR. BIGGINS: That's right. And we've set up computers in the back room that should still be available after the meeting if you want to take a look at that webpage.

MR. CAMERON: That's a good idea. That's -- thank you. Thank you very much, Jim. Other questions on this entire process from anybody? And we do have time to take your questions, so don't be bashful about it if there's anything you want to know.

(Pause.)

MR. CAMERON: Okay. Great. And we'll all be here after the meeting too if you want to talk further about any of this.

But we're going to go to the comment part of the meeting. And I'm going to first go to the elected officials in the community so that you can hear what their views are. And we have Representative O'Day -- state representative -- who's going to talk to us. And is it 29th?

REPRESENTATIVE DAY: Yes, sir.

MR. CAMERON: 29thDistrict.

REPRESENTATIVE DAY: Good evening, everyone. And thank you for being here. First I'd like to let you know that Judge McDonald is not here tonight because he's in Washington doing business for us. And so, therefore, I get the opportunity to speak to you, and obviously probably not as eloquently as the Judge could. But he did want me to let you know that he wishes he could be here but he can't be because he's helping us in Washington.

First thing, my name is Mike O'Day. I'm the state representative for District 29, which covers all of Matagorda County and the western portion of Brazoria County. I just want to let you know that I live -- or I have my recreational home here in Matagorda County in view of the nuclear plant. I've had this property for about the last ten years.

The reason I tell you this is that I want you to know that I have no concerns directly with STP. My qualifications are I'm a water well contractor by living. I make my living being a water well contractor, so therefore I drill a lot of water wells and analyze water wells around the county.

I was on the Brazoria County Water Conservation District, so I'm aware of the water outtake that could be possible from the nuclear plant. I'm on the Natural Resources Committee in the House of Representatives, of which we deal with the surface water in the State of Texas, and the Recreation and Tourism Committee, which is over Texas Parks and Wildlife and Fish and Game.

I tell you this not for any other reason than to let you know that I believe I'm pretty well informed to be able to stand up here and say that **[#1 : Support-Nuclear Power]**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.

If I didn't think so I wouldn't be -- my recreational time is spent in the Colorado River and in the Matagorda bays. My children and my grandchildren all love to fish and enjoy the environment around the bays.

Th**[#2 : Ecology-Terrestrial]**The outfall from the nuclear plant obviously is beneficial to the river. And the lake that we have -- the 7,000 acre -- also creates some of the best bird habitats in the state of Texas.

MR. CAMERON: Representative, could you -- I guess people are having trouble hearing you in the back of the room. So if you could --

REPRESENTATIVE O'DAY: Okay. Is that better?

MR. CAMERON: You can take that -- you can hold that too if you want.

REPRESENTATIVE O'DAY: Okay. **[#3 : Support-Nuclear Power]**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.

[#4 : Socioeconomics]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.**[#5 : Support-Nuclear Power]**Nuclear provides reliable, low cost power in great quantities, clean energy with zero gas emissions -- greenhouse emissions.

And it offsets the use of natural gas in the state of Texas. This nuclear plant would offset the same as it would take to -- for -- pardon me. Let me start with a different sentence. **[#6 : Meteorology and Air Quality]**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.

And I guess what we're saying is is that the **[#7 : Support-Nuclear Power]** 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.

I would like to tell you that I'm proud to be the representative for Matagorda County. I'm proud of the NRG and STP and the -- their track record because that's -- their track record has been -- they gave us the ability to pass the laws that we need in the state of Texas to help you have good clean power from nuclear energy. Thank you very much.

MR. CAMERON: Okay. Thank you, Representative O'Day. And we're going to go to Sheriff James Mitchell at this point. Sheriff?

SHERIFF MITCHELL: Good evening again. My name is James Mitchell, and I am the county sheriff here. I've been the sheriff here for the past 12 years. I'm now in my 26thyear in law enforcement. All of that time has been here in Matagorda County.

I've lived my whole life here in Matagorda County -- graduated from this -- not from that high school across the street but when it was a little further across town.

There were two generations in my family before me to live here in this county, and there's been two generations since then, being my children and my grandchildren. And I hope to have more grandchildren raised in this county. I'm accompanied tonight by my wife Paula sitting over there.

[#8 : Outside Scope-Security and terrorism]

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.

My entire career in law enforcement has been involved with this nuclear plant -- has been involved with the security at this plant. 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.

The FBI on that tour was so impressed with everything that they saw. I only wish that you the public could see everything there is to see there. As they say at the plant a lot of that is safeguards information.

Our nuclear plant I believe, for a variety of reasons, is very unique to those of other nuclear plants around the country. And I want to give you a couple of those reasons as well.

Fo**[#9 : Outside Scope-Security and terrorism]**For instance, 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.

Our SWAT team -- we have a 15-man SWAT team at the sheriff's office combined with the Bay City Police Department. Many of the officers on that SWAT team received their basic, their immediate, and their advanced training at the nuclear plant training with those security officers out there at that plant.

My employees -- my deputies participate in force-on-force exercise, both inside and outside the protected area, because many of my employees have been red badged. They're cleared to go into the protected area unescorted.

We**[#10 : Outside Scope-Security and terrorism]**We participate 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.

[#11 : Outside Scope-Security and terrorism]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.

The emergency training that we received to be able to support STP we use in every type of disaster that comes through this county. I'll give you a quick for instance. We had a grain truck driving through our county that was hauling 65 illegal aliens in the back of it. That truck went into an S curve, rolled over, and you can imagine what happened. Due to the training that received in association with STP we were able to handle that. We immediately got all the ambulance personnel we needed. We called on school busses to handle the walking wounded. We knew where to call on every resource that we needed to handle that catastrophe, and I contribute that to the training that we do with STP.

[#12 : Outside Scope-Emergency Preparedness]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.

Sorry I had to keep putting these on, but I wouldn't be able to say anything without them. Last, but not least -- I introduced my wife earlier, and I'll tell you another reason why I have a lot of confidence in the nuclear plant security program -- because my wife is the senior security coordinator out there for that.

Now, I told you that I've been 26 years in law enforcement. She's only been out there since last April. So that confidence started long before we went to work there, but it did give me the confidence that I didn't have a problem with my wife working out there. And I don't have a problem raising my children here.

[#13 : Support-Licensing Action]And 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. Thank you.

MR. CAMERON: Okay. Thank you very much, Sheriff. Next we're going to go to the mayor of Bay City. And this is Mayor Richard Kenapik.

MAYOR KENAPIK: Good evening everyone, NRC staff seated here, and those in the audience. My name is Richard Kenapik. I am the mayor of the city of Bay City. My fellow citizens, friends, and visitors who are gathered tonight, I want to say good evening and welcome once again.

I'm sure glad the NRC left up the list of acronyms on the boards. For those of you who are familiar with acronyms -- and STP loves acronyms -- you're all familiar with the term NIMBY. For those of you who are not it's Not In My Backyard.

Well, I'm here to tell the NRC and all of you assembled that I am a PIMBY. And you may ask what is a PIMBY. That means Please In My Backyard.

[#14 : Socioeconomics]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. We also are a surplant, which was built in the late nineties. It's only operating at 50 percent capacity because we built it so well we can take a lot more homes, lot more residence in our community.

So **[#15 : Support-Licensing Action]** we 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. Because I'm here to tell you I'm going to paint a human picture of STP and all the wonderful employees who are seated in the room.

[#16 : Support-Plant]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.

Thank you for allowing me to make these comments.

MR. CAMERON: Thank you very much, Mayor. We're going to go to Mayor Joe Morton. And Mr. Morton is the mayor of Palacios.

MAYOR MORTON: Thank you, Chip. Welcome to our part of the country in Matagorda County. Good evening. My name is Joe Morton. I am the mayor of the city of Palacios. I thank you for the opportunity to come and speak before you this evening as a representative of Palacios citizens. This afternoon I spoke as a citizen of Palacios. Tonight is the mayor.

[#17 : Support-Licensing Process]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.

I've served the citizens of Palacios as mayor for the past 20 months. I was a city councilman for 48 months prior to that. In the last 68 months I have asked many, many citizens their opinion about STP. A great majority of them was totally supportive of it -- thought it was great for the community. A few of them had some concerns, and very few of them had any really opposition to it. Mainly they were opposed to nuclear power period.

[#18 : Socioeconomics]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. **[#19 : Need for Power]** 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. **[#20 : Support-Plant]**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. The NRC also plays an important part in this development. Under your guidance and direction the last 25 years of safe operation is supported by some of the highest scores in graded efficiency and exercises by your agency.

[#21 : Outside Scope-Emergency Preparedness]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.

[#22 : Outside Scope-NRC Oversight]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. God bless our country.

MR. CAMERON: Thank you very much, Mayor Morton. We'll go to Bruce Marceaux. Is Bruce here?

MR. MARCEAUX: Brent.

MR. CAMERON: Brent. You say your brother didn't come tonight.

MR. MARCEAUX: I've been called worse.

MR. CAMERON: Okay. This is Brent Marceaux.

MR. MARCEAUX: I'm not bringing any paperwork to read of. I just want to speak about something that I think is important from both sides, predominantly what's right, good, fair. As an elected official it's my duty to look out for the safety, health, well-being, economically of the citizens I serve.

And recently I had the opportunity to go and sit on a pier and watch my brother fish and a friend of his. And this is an extremely sensitive issue. And they caught a few fish, but they really weren't having a slam night.

So we sat for a time. And as we did, as the conversation waned, **[#23 : Ecology-Terrestrial]**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.

[#24 : Support-Licensing Action]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 range our children would benefit dramatically. And so I wholeheartedly support it and thank you all for the opportunity to speak.

MR. CAMERON: Thank you very much. Brent is on the city council.

We're going to go next to Stephen Kale, and then we're going to hear from Bobby Head and then John Corder. Stephen?

MR. KALE: Good evening. My name is Stephen Kale. I am a resident of the city of San Antonio. And probably, as you can detect, I'm not a native of Texas. My wife and I arrived here about five years ago by way of Pittsburgh, Pennsylvania, and Washington, D.C. It was a journey that required 35 years, but we finally got to Texas.

We love San Antonio. We find the people are warm-hearted and nice people to be with -- nice friends. And we love the San Antonio Spurs. In fact, my wife is probably at home watching the Spurs play the Pacers even as I speak up here.

I appreciate the opportunity to present these comments -- scoping comments to the NRC. But, first, **[#25 : Need for Power]**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.

I've installed in my own home one of CPS's programmable thermostats. It's the kind that CPS can switch off my air conditioning the late summer afternoons, and we all know what those are like in July and August. It's been about three years ago, and I don't really know if it's working or not. It's supposed to turn off for no more than ten minutes, and if it's doing that I've certainly noticed no discomfort in my home.

Perhaps they could switch it off even longer if that would help them with their load factor in the afternoon. I'm not sure my dogs would like that, because except for when we go bird hunting in the fall, when they're home they like their creature comforts.

I've also purchased a solar-powered attic ventilator that I ran across several months ago. Hopefully -- I've not had it during the summer, but hopefully it will help keep the attic

cooler, reduce my air conditioning load, reduce CPS's load, and save me some money. It was not cheap even with the CPS rebate, which was fairly generous.

In addition to that, I purchased from CPS a kilowatt of their wind-sourced electricity. And, again, I hope that's doing my part for the environment. My home is fairly modern. It has modern insulation, low emissivity windows. I feel as a resident that I've done all that I can.

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.

Paragraphs 51.71 and 51.75 of 10 CFR 51 state that the contents of the draft environmental impact statement, EIS, will include, among other things, consideration of the economic, technical, and other benefits and costs of the proposed action and alternatives and indicate what other interests and consideration of federal policy, including factors not related to environmental quality.

So based on these requirements I've prepared a list of just four criteria what I believe the EIS -- the draft EIS should evaluate on an equivalent basis, both for the proposed action, the no-action case, and the alternatives that the NRC determines need to be studied.

The first of these involved energy security. **[#26 : Outside Scope-Miscellaneous]**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.**[#27 : Need for Power]**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.**[#28 : Benefit-Cost Balance]**Third, another reason that I like San Antonio is that 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.

[#29 : Alternatives-Energy]And, finally, lastly, the land for these reactors exists. Installation of the equivalent capacity -- 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.

[#30 : Alternatives-Energy]And I'm thinking primarily of wind and solar, 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.

I appreciate this opportunity, and I thank you for listening.

MR. CAMERON: Thank you very much, Stephen. Very helpful. Thank you. Is Bobby Head -- Bobby? Oh, there he is. This is Bobby Head. (Pause.) And we're going to put these comments of Stephen's as another exhibit for the record.

MR. HEAD: Hello. How are you all? My name is Bobby Head. For those of you that know me know that I'm a great talker, but I'm not much of a speaker. I had to bring my notes too and my glasses. A little bit about myself. I was talking to a gentleman earlier about the weather, and I told him I was never going to get used to the weather down here. And he said, You're not from here? I said, No, I was born up north. And he said, Up north? I said, Yes, the hospital on the north side of town over here -- Matagorda General.

[#31 : Alternatives-Energy]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.

All of them have drawbacks. All of them have unique benefits. But about our environment here, it's really strange that what Brent Marceaux was saying earlier about the frogs, I've had an opportunity to work at the power plant on a couple of outages as an outside contractor.

And **[#32 : Ecology-Aquatic]**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.

[#33 : Ecology-Terrestrial]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.

[#34 : Ecology-Terrestrial]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.

[#35 : Support-Licensing Action]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.

[#36 : Outside Scope-Security and terrorism]As far as our nuclear plant is concerned, as a Matagorda County resident, I almost have nothing bad to say -- almost. I'll come back to that in a minute. 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.

A Westinghouse gentleman was working the last outage, and he had finished his job and he left, and he went -- he was staying at the hotel next door over here. And he'd gone into the -- he had given up his badge and he had gone in. 30 minutes later they needed him back. Too bad. Too bad. He couldn't go back. He had to go the next day, go through the whole scenario of getting everything tested so he could get back in.

Those people out there are the most secure people. **[#37 : Support-Plant]**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.

As far as the economic impact to Matagorda County, doggone, we've got businesses here that have been here -- we've got Taylor Brothers Funeral Home that I think is the oldest Chamber member -- been here since the early 1900s. Ted's Jewelry Store has been here since the 1900s. I think they're the second oldest Chamber member.

Yes, we have new industry coming in. We have your Wal-marts and we have your Chili's and these new guys coming in -- the new Walgreens -- I think CVS is planning on building a new drug store here.

But we have these old businesses too. And they need -- we've got people like Wild Bill's and Green Brothers and Sissy's One-Stop. And down in Palacios you've got the Ace Hardware and you've got the PMR, which is Palacios Mexican Restaurant -- people like that. Also Blessing and Matagorda and Clemville and Bowling and -- Bowling's not in Matagorda County, but these -- **[#38 : Socioeconomics]**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.

Now, as far as the one concern I had -- and it's kind of more of a economic thing. **[#39 : Socioeconomics]**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.

Once again, thanks for this opportunity. If anybody has any questions for me I'm here to answer. Thank you very much.

MR. CAMERON: Okay. Thank you, Bobby. And John? John Corder.

MR. CORDER: I'd like to express my appreciation for the Nuclear Regulatory Commission for coming here tonight and being so gracious to host this any questions we may have.

[#40 : Outside Scope-Safety]I'm from Brazoria County -- a citizen. 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. Thank you very much.

MR. CAMERON: Thank you, John, for being here tonight. We're next going to go to Bruce Martin, then Paul Gunter, then D.C. Dunham. And Bruce?

MR. MARTIN: Well, with all these excellent speakers I kind of feel like the guy that has to follow Bob Hope when he's telling jokes.

[#41 : Support-Licensing Action]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.

[#42 : Support-Plant]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.

And as for the people that are against it, most of them have a personal axe to grind. If you worked there 20 years and drew the high salaries it was fine. But now that they're not working there it's not any good. And I thank you for your time.

MR. CAMERON: Okay. Thank you, Bruce. And now we have Paul Gunter that's going to talk to us.

MR. GUNTER: Thank you. My name is Paul Gunter. I'm with Beyond Nuclear out of Takoma Park, Maryland. And I step up here on this stage -- and, really, it's about all I need is to have another foot path here.

But, you know, my daddy was from Canton, Texas, and his nickname was Treetop, because he was six-foot-ten. But, you know, I like to think that we're all here not just whether we're for or against nuclear power.

We have some common interests. And what I'm here to talk to you tonight about is the common interests that we have in that we all should be concerned about a thorough, open, and a process with integrity.

And I think that right now from our perspective, as we look at what you all are going to go through and what is happening around the country, is that there is a crisis in public confidence. And it's a crisis that comes from this process. And what I'd like to speak to tonight in particular is a crisis around the National Environmental Policy Act that we're here to talk about tonight.

I think that it's important for us to realize that it's not just about building this plant, but it's about how we're going to approach this issue and a number of environmental concerns that it raises, not just for you, but for generations to come. And not just for the generations that will inherit -- that get the watt of electricity, but for the countless generations that will inherit all of the nuclear waste without one watt of electricity from the process from -- from this oversight process and from the construction and from the operation should it happen.

[#43 : Uranium Fuel Cycle]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.

And let me just tell you that Yucca Mountain is crisscrossed with earthquake faults. It's surrounded by volcanic -- you know, by volcanoes -- some of the youngest in the country -- the Lathrop Wells cinder cones. And this is where we're doing all of our research and all of our focus -- you know, what we're going to do with this nuclear waste.
[#44 : Uranium Fuel Cycle]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 falling apart. And, in fact, there is no confidence.

So the environmental scoping process that we're talking about here -- if this is an open process, if it is a democratic process, if it is a process with integrity we believe it should allow us contingence to raise the issue of how your reactor, if you choose to call it your reactor, will impact future generations and places that are having their whole process -- it looks more like a political mugging than it is an environmental impact statement.

Now, I want to close with just one other point because it affects the national security of our country, which is something that we all should be concerned about, whether we are for or whether we are against nuclear power.

[#45 : Outside Scope-Security and terrorism]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.

[#46 : Outside Scope-Security and terrorism]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.

And we should be afforded an opportunity -- you should be afforded an opportunity to look at it in the context of licensing more reactors in this country. Thank you.

MR. CAMERON: Thank you very much, Paul. D.C. Dunham.

MS. DUNHAM: Good morning. I'm D.C. Dunham, and I'm the executive director for Bay City Community Development Corporation. And as an economic developer many of us only get an opportunity like this kind of expansion once in a lifetime. So it's really important that we take advantage of this opportunity. And many of us have already started doing that. We've turned a eyesore into a great asset. We've begun developing subdivisions. We have new spec houses going up. Matter of fact, building permits are up 250 percent since the announcement.

We've started recruiting retail stores, and sales tax is up over 30 percent. We've developed a new associates degree program. We've formed an alliance with educators and industries. We've had career fairs and job fairs. We've increased scholarships and on-the-job training programs.

But let me digress a moment and talk about that eyesore, which is my pride and joy, and education, which is my passion. That eyesore that I'm talking about is the old K-Mart building -- not the old, old K-Mart building, but the old K-Mart building on 60 South. And if you're not familiar with what I'm talking about you obviously don't live in Matagorda County because it's been an eyesore to this community for over 15 years.

But we took a derelict big box and turned it in to a great asset in this community. We've got the unit 3 and 4 headquarters on one side of the building. And on the other side we've got a training facility that houses Wharton County Junior College. And in the middle is a great park environment -- an atrium that allows our business partners and our students to mingle and share ideas.

And we presently have 162 students, which is three times the amount of students we had a year ago in that facility. And they're preparing for the new jobs that are being created just across the hall.

[#47 : Socioeconomics]That new workforce development initiative is a huge strength for our community. Which brings me to my passion -- education. 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 wasn't how are we going to meet the demands of our local industries' needs for all of the jobs that are going to be created.

So we formed an alliance with all of the large industries -- not just STP -- but all of our large industries in Matagorda County. We brought in all four of our I.S.D.s -- we have four high schools in Matagorda County -- and the community colleges throughout the region, as well as the four-year colleges. And we brought in our government folks -- our government partners -- from the federal government all the way down to our local officials. And we began working on this issue.

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.

The Mid Coast Industry Education Alliance is still meeting today -- we meet quarterly. And we continue to talk about ways that we can make Matagorda County a great place for our young adults to live and raise their families and to have good paying jobs in Matagorda County, again, creating a great strength for our community.

[#48 : Support-Licensing Action]So I'd like to challenge you to join me in embracing this opportunity. And I'll mention Mitch Thames -- he hasn't spoke tonight -- I don't know if he will. But between he and I, no matter what your passion or your interest is, I'm sure we have a committee that I'd welcome you to serve on. Thank you.

MR. CAMERON: Thank you very much, D.C. Mitch, did you want to talk again tonight? Okay. Come on up.

MR. THAMES: I am the Bay City Chamber of Commerce president. Are you kidding? Do I want to talk again? I am almost as bad as a politician -- no offense to the politicians still left in the room. Sorry, Sheriff. I apologize.

My name is Mitch Thames. I am the president of the Bay City Chamber of Commerce and Agriculture, and I'm telling you I've got one of the best jobs in this county because I get to sell this county.

We talked a lot about the environment today. Well, let me tell you a little bit. We've got a river that flows fresh water. We've got two bays and estuaries in the Gulf of Mexico that's saltwater.

The sensitivity of our environment is massive. We did -- we have one -- Mr. Head's right -- we have one. The North American Audubon Christmas bird count -- many, many,

many years -- this year -- 236 species of birds in a 15-hour period -- excuse me -- in a 12-hour period in a 15-mile circle. We have -- we are the birding capital of North America. I'm trying to get that word out, so help me.

But I look across the room and I see an awful lot of friends and family, and I appreciate you all coming out. I moved here to Bay City with my wife -- and I'm going to get points because I'm going to introduce her. Carolyn, thank you for coming and supporting me, ma'am.

But I'll tell you, we came to Bay City -- we chose to come to this community. We chose to move our family here. We chose it because of the opportunities available for us. We have world-class fishing -- deep-sea fishing, freshwater fishing, also fishing out of the bay. We have some of the best water fowl hunting known to man -- unbelievable. We have folks coming in from all over Maryland and all over coming to hunt right here in Matagorda County.

But I'll tell you this, it's not always been so pretty. Common ground is a good thing, but I'll tell you this. Common ground with double-digit unemployment -- 14 to 17 percent unemployment and an economy flat, if not declining, is not right.

And we for years asked, when is somebody going to come and help us. Well, they didn't come. And all of these suggestions from all over the place that we've heard today didn't come until we rolled our shirt sleeves up and went to work building this community. We've now got a single-digit unemployment rate here.

We do have a college that our kids are being able to attend. Our kids do not have to go out of town for a high-paying job, and that's our goal. We can educate them here and we can employ them here. Because I'm selfish I want my grandchildren around here.

And so as we talk about common ground I do appreciate it. And I've loved listening to a lot of the -- a lot of what's been brought up here today. But

[#49 : Support-Licensing Action]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. You can't do it, folks. We have got to have high-paying jobs -- not just 3 and 4 -- that's just the beginning -- that was Christmas. We have got to build this community an industry at a time. And that's what you're here to hear.

And I certainly thank you so much for your attendance and this process. And thank you so much for visiting Matagorda County. Thank you.

MR. CAMERON: Thank you, Mitch. We'll go to Karen Hadden and -- at this point. And then William Warner and Jimmy McCauley. This is Karen Hadden.

MS. HADDEN: Good evening. I'm Karen Hadden. I'm the director of the SEED Coalition. We're working for clean air and clean energy throughout the state of Texas.

I'd like to respond to a couple of comments and raise a few issues. One is that economic development is, of course, great. Who could argue that? But I want to point out that it can come in many ways -- that a community can seek it out.

[#50 : Alternatives-Energy]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 [sic] to seriously consider that path.

[#51 : Outside Scope-Safety]I spoke earlier -- well, first of all, 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.

[#52 : Process-NEPA]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.

[#53 : Process-ESP-COL]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.

[#54 : Outside Scope-Safety]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.

[#55 : Process-ESP-COL]One reason -- a really important issue. 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 [sic] 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.

Why does this matter? By the way, they've had this design for ten years. And it seems that by now it could have been put into electronic version and be up on the Adam

system. It's way late. Right now we have to talk to the public document office and see what they can do. We may have to pay thousands of dollars to even get a copy.

[#56 : Process-ESP-COL]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.

[#57 : Process-ESP-COL]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 AVWR DCD.

So the documents containing the quantities of radioactive material that would be released during normal operations are not yet available to the public. They would require a trip to Washington, D.C., a hefty budget, a whole lot of copying. If somebody can please give me a copy of the DCD I would take it. But that information is not currently available to the public other than in Washington, D.C.

[#58 : Health-Radiological]They 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.

[#59 : Health-Radiological]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.

[#60 : Health-Radiological]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.

[#61 : Health-Radiological]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.

[#62 : Health-Radiological]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?

[#63 : Health-Radiological]It 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.

[#64 : Health-Radiological]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.

[#65 : Health-Radiological]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.

And thank you for your time. And I'm sorry about my voice. Thank you.

MR. CAMERON: I just want to emphasize for the record that there were three requests made that are within the province of the staff -- the public meeting on safety side issues, scoping meetings in San Antonio and Austin, and the availability of the DCD document.

And I would just like to remind all those folks who are thinking of intervention here is that it would be best not only to make that request here, but to send a letter to the Commission with your reasons for that since they're the only ones that can make that decision. Did you want to add something, Paul?

MR. KALLAN: Yes. In terms of public scoping meetings, they're usually volunteer meetings. They're not -- I mean, the NRC goes out of its way to have these public meetings to educate the public in the local area.

So we try to have -- I mean, it's resource intensive, and that's the reason why we have it close to the proposed site. So that's one of the reasons we don't have them in San Antonio; we're having them close to this area.

MR. CAMERON: Okay. Thank you, Paul, for providing that rationale for why we have it here. And that may be -- it's going to be confined here. But I think that there is a request that you're going to have to take home and evaluate before you decide. Go ahead. Is it Mr. Warner? William Warner?

MR. WAGNER: Wagner.

MR. CAMERON: Okay. How about Jimmy McCauley? Jimmy, that's you coming up. No?

MR. WAGNER: Wagner.

MR. CAMERON: Oh, okay. Sorry.

(Pause.)

MR. CAMERON: In fact, do you want to just use this?

MR. WAGNER: Yes, that's fine.

MR. CAMERON: All right.

MR. WAGNER: Thank you. In keeping with what this thing is supposed to be about -- scoping the environmental report -- I am addressing you. I am not addressing the public at large. I represent no one but myself.

The things that I am concerned about are the true environment surrounding the plant. What I saw when I read the existing environmental report is something that looks 30 years old. That is not today's environment.

One thing that jumped off the page at me was the emphasis on Matagorda County and anything to the north and east. That is not where things are happening. They are happening to the south and to the west. And I'll get into that in a minute.

[#66 : Outside Scope-Safety]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.

[#67 : Outside Scope-Safety]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.

[#68 : Outside Scope-Safety]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.

[#69 : Geology]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?

[#70 : Outside Scope-Safety]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.

In the wonderful world of knowledge that we now have after the movie called Charlie Wilson's War, where he was furnishing weaponry to the mujahadin to remove the

Russians from the north end of Afghanistan, the one that got all the interest was the missile -- the hand-launched missile from the ground. The one that didn't get as much notoriety was the introduction of geosatellite targeting for an ordinary mortar.

What this brings up is a security problem. **[#71 : Outside Scope-Security and terrorism]**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.

[#72 : Outside Scope-Security and terrorism]Same topic: security. 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.

[#73 : Alternatives-System Design]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.

[#74 : Outside Scope-Security and terrorism] 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. [#75 : Outside Scope-Security and terrorism]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.

[#76 : Alternatives-System Design]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.

[#77 : Outside Scope-Miscellaneous]

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.

[#78 : Ecology-Aquatic]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.

[#79 : Hydrology-Surface Water]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.

[#80 : Health-Radiological]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.

[#81 : Process-ESP-COL]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.

[#82 : Process-ESP-COL]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.

[#83 : Outside Scope-Security and terrorism]Get real on security. This is the 21stcentury. 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.

I tried to make these points earlier. I'm hoping I'm making it now. Physical confrontation at the site is neither required nor desirable to achieve the objections of terror; you don't have to do it.

MR. CAMERON: This is all very valuable information for us to hear, Mr. Wagner, and I know that you're probably not going to send in written comments. We want to hear it. I just ask you to try to, you know --

MR. CAMERON: This is all very valuable information for us to hear, Mr. Wagner, and I know that you're probably not going to send in written comments. We want to hear it. I just ask you to try to, you know --

MR. WAGNER: I'm almost done.

MR. CAMERON: Okay. Thank you.

MR. WAGNER: I take lousy notes. **[#84 : Outside Scope-Security and terrorism]**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.

[#85 : Benefit-Cost Balance]In the end this is all about money: who's got it, who doesn't have it. Part of the problem is we know who's got it, and it ain't us. It's big oil; it's big oil suppliers; it's our big buddy trading partner to the very far west.

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.

Is a blind eye being turned in deference to some political agenda and in violation of the Atomic Energy Act? Or do we just hope it goes away?

[#86 : Benefit-Cost Balance]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?Thank you.

MR. CAMERON: Thank you very much, Mr. Wagner. We have a few speakers -- Jimmy McCauley, Ernest Opella. We still need to hear from Dr. Hefner and from Owen Bludau. And this is Jimmy McCauley.

MR. McCAULEY: Hello. I'm a fisherman, a father. I'm also an INC technician out there at STP. I've been and out of that plant since 2003. I've worked in the industry of electrical electronics -- chemical offshore for four years and served a little time in the Navy.

[#87 : Outside Scope-Safety]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.Thank you.

MR. CAMERON: Thank you. Thank you very much. And this is Ernest Opella.

MR. OPELLA: For some of you who know me, I'm not going to speak longer than Mr. Wagner. My name is Ernest Opella. I chose Bay City as my home 47 years ago. I have a vested interest invested in Matagorda County. I raised a family here -- four children. One of my daughters is here -- living here. I have my business here. I have my home in Bay City. All my financial resources are tied up in Bay City.

[#88 : Support-Licensing Action]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.

[#89 : Support-Plant]But I would like to go back on something that the mayor said. As I look around the room here, I don't see too many people that was in Bay City 28 years ago when the National Regulatory Agency met at the old service center.

But I was there. I was there representing the people of Bay City. I was representing the city council. 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.

The mayor of Bay City told you a few minutes ago he's ready in our backyard. We said that 28 years ago and we're repeating that again today. So I urge the NRC to speedy licensing and approve this plant.And thank you.

MR. CAMERON: Thank you, Mr. Opella. Dr. Hefner. And then we'll go to Mr. Bludau and then to Mark McVernon and Joe Sheppard.

DR. HEFNER: Thank you, sir. My name is Jim Hefner. I'm the site doctor out at STP. I've been coming down here for 16 years now, gotten to know most of the folks out there; feel like I'm part of the family.

One statement that was made earlier referenced exposure to cancer. It's an old subject. We've all heard it many times. And I want to do what I can now to put it to rest.

Sixteen years ago when I joined the staff out at STP, I had similar concerns and did some research and then relaxed, because I realized it was a very small possibility. But in the last 16 years multiple studies have come to fruition, and I think it's etched in stone now. I think we can put this to rest. Let me quit quivering here; I'm not a good speaker. But I do want to share this. It's important for you to know.

[#90 : Health-Radiological]The National Academy of Sciences, National Cancer Institute put together multiple studies. The NEI has put this fact sheet together -- and there's a copy of this on the way out. Please help yourself. 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.

Anecdotally we've got a whole community here that will tell you that they're not worried about it and it hasn't happened. Now, this is national stuff; this is international stuff. And

it's good science; it's solid. You can find a lot of flaky stuff on the internet. This is gold standard research, and it's real, so relax.

[#91 : Health-Radiological]Let's look at little closely -- or more closely at the local impact. This is a study that's also available in the back when you leave. Please help yourself. Two Rice 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.

So I hope we can finally put this to rest. There's enough to talk about here, and this subject just keeps coming up. And maybe it will finally go away. So I'll be available afterwards if you want to ask me any questions. Thank you.

MR. CAMERON: Thank you, Dr. Hefner. And Owen is coming up.

MR. BLUDAU: Good evening. Thank you very much. My name is Owen Bludau. I'm executive director of the Matagorda County Economic Development Corporation. The Corporation is composed of nine agencies -- five are public funding agencies -- the county, the navigation district in Palacios, Port of Bay City authority, the Bay City Community Development Corporation, and the City of Palacios Economic Development Corporation. In addition, there are representatives of the four area Chambers of Commerce on our board.

[#92 : Socioeconomics]The focus of the Matagorda County EDC and my job is to bring new economic development to Matagorda County. And this, as D.C. Dunham said, 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.

[#93 : Support-Licensing Action]We welcome 3 and 4. They're good for the county.**[#94 : Socioeconomics]**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.

[#95 : Support-Nuclear Power]As I mentioned earlier this afternoon 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.

[#96 : Socioeconomics]We're after STP 3 and 4 for a number of reasons -- the same thing we were after Exelon for. 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.

[#97 : Socioeconomics]The temporary construction workers that are going to be here will be over a six-year period. And they will ramp up, they'll have about two years of 4,000 people, then they'll ramp down.

They're not all going to live here. They're not all going to be here at the same time. But a lot of them are going to live here -- a lot of them are going to commute in and out. 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.

[#98 : Socioeconomics]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.

[#99 : Socioeconomics]Major -- 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.

We welcome here because the increased -- addition of 3 and 4 will make them stronger and hopefully increase their contributions and their involvement in the community. But, more importantly, their employees are part of the community. They're our neighbors; they're our citizens. Individually they provide strong support to our churches, our civic groups to our youth and environmental activities, school districts, educational opportunities, and to the governmental units here.

We are strengthened by the presence of these employers among us. Two of the STP employees serve on my board. They do not serve as members of STP, but as elected members of other organizations that are represented on the board.

We want to see the new employees from 3 and 4 also follow in this same footpath of being involved in the community. We need the new blood, the new ideas, and the new vitality that they can bring. We're an aging community and our organizations are aging.

They need new blood and new membership. So they will provide economic benefits to all of us in the county.

[#100 : Socioeconomics]As the sheriff mentioned about emergency planning -- and Mayor Morton also mentioned it -- it 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.

[#101 : Outside Scope-Emergency Preparedness]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.

And we experience the benefits of that two years ago when we had to evacuate for Hurricane Rita. We went through that smoothly and without disruption as compared to what happened out of the Houston area when they were tied up for almost 24 hours or more on the highways getting out. So we have good evacuation plans. We have people well trained to implement those plans.

In summary, I want you to know that **[#102 : Support-Licensing Action]** 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. Thank you.

MR. CAMERON: Thank you very much, Owen. We do have one -- we have three speakers left. We have Ed Dykes. Ed is -- are you here? Here is he. And then we're going to go to Mark McVernon and then to Joe Sheppard.

MR. DYKES: I would like to talk to you a bit about nuclear power, nuclear energy, and the environment. I've had the privilege of working with some people who were at the dawn of the nuclear age -- people who were involved in the Manhattan Project and then in the commercial business.

One of the tones of the meeting seems to be that somehow this is dancing with the devil; that we're going to get all this economic progress, that somehow or another we're taking a huge risk in doing this. And we've heard a lot of people come up and say, Well, I like nuclear energy because of the money it's going to bring in here. And I think some of the other people caught on to that. Well, you guys are just willing to sell your souls.

Well, let's look at what the objective is. We want to be able to pay our electric bills and send our children to college at the same time. That's the end goal. And while we're at it, we want to continue to fish in the Colorado River and now in the Gulf of Mexico.

Now, how many people have ever come face to face with nuclear medicine and have had a slurry pumped into your system and then had doctors image you? How many people? Raise your hands. Okay.

Now, there's a little interesting fact I want you to consider. The number of curies that were pumped into our body equals the total number of curies that STP 1 and 2 emit to the environment every year. Okay? Does that put things a little bit in perspective?

Does anybody know how much uranium there is in the oceans of the world? Anybody? There's four-and-a-half billion tons of uranium in the oceans of the world. Now, that four-and-a-half billion tons of uranium came from the maybe five hundred billion tons of uranium that's in the mantle of the earth.

Now, who here thinks that man's activity is capable of making any more than an insignificant increase in this environmental load? She does. Okay. We have one person who believes that.

Now -- and that's -- oh, two. Okay. Now, once again, we get into the old thing of risk perception concerning the environment and human activity. The average environmental radiative load in the United States of America -- the background radiation level is approximately 100 millirem, and the average American gets about 10 millirem of exposure through medical things a year. That's 110 millirem.

Now, worldwide -- I'm going to say some stuff that's really going to scare you. And you people who are afraid of radiation, you better plug your ears right now. And I suggest the young lady at the front of the room here leave, because this is going to scare the pants off of you.

Just in India -- there's a vast province in India -- in western India where the average background radiation is approximately 1,400 millirem a year, which is 14 times what the background radiation level is here. Some of the regions have 7,000 millirem, and human beings have lived there for over 100,000 years. and none of them have three eyes.

Now, how can this be? They are living in a nuclear disaster area -- in an area with radiation levels equivalent to a vast nuclear disaster over a gigantic region far in excess of Chernobyl.

I shouldn't be saying Chernobyl, because these STP guys are probably tightening up right here talking about that particular little topic.

But there's another interesting little fact about that. Let's just look at the disaster there from a plant that was no design, that has no containment associated with it, a fully trained operational staff, most of whom had just come over from coal fire plants -- they had no particular nuclear training.

Who knows how many people have died today from Chernobyl? How many? Who knows that number? Take a guess. Somebody tell me. How many have died? MALE VOICE: If you want to go to the Ukranian Health Ministry, it's about 36,000.

MR. DYKES: The Ukranian Health Ministry, which you can look up on the web, says 56.

MR. CAMERON: Ed, this is like having the Ed Dykes show here.

MR. DYKES: Okay.

MR. CAMERON: You know.

MR. DYKES: I apologize. Okay. I'll finish up here. Okay. **[#103 : Uranium Fuel Cycle]**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.

[#104 : Alternatives-Energy]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.

[#105 : Alternatives-Energy]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.

Well, anyway, we can go on for -- anybody wants to talk about that some more, particularly those -- the opposing side and the young lady in the front, may talk to me at length. I will stay until 5:00 a.m. in the morning if necessary. Thank you.

MR. CAMERON: Thank you very much. I missed Mr. Singleton, who's going to talk, and I promised Mr. McCormick that he could have --

MS. SINGLETON: You can't give me the last word.

MR. CAMERON: And then we're going to go to Mr. McBurnett and Joe Sheppard. Mr. Singleton?

MR. SINGLETON: I just wanted to share a short news release with you I just tore off the wire. A series of catastrophic errors compounded by instrument malfunctions resulted in the deaths of absolutely no one at the West Texas wind farm Thursday. Three sheep were mildly inconvenienced.

[#106 : Opposition-Plant]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.

One way you can tell this is an informal public hearing and not a legal process, had this been a legal process a lawyer would have jumped up somewhere and said objection. What does all this economic data have to do with the scope of the environmental review, which is what this hearing is all about. Nothing that's been said about the benefits of this plant for Matagorda County or anyone else has anything to do with the purpose of this hearing, which is to talk about the scoping of the environmental review.

The last speaker talked about human impact, and I was reminded -- I've heard Rush Limbaugh on more than one occasion say human beings do not have the power to change the environment. And then he'll turn right around and blame global warming on cows farting. I never understood that, and I never understood the idea that radiation is good for you.

When we were talking several years about nuclear waste dumping in West Texas there were actually some people that came to the meetings that has spurious statistics to suggest that a little bit of radiation was good for you. They called it Vitamin R. It's ridiculous then; it's ridiculous now.

I just want to make one final point, and that is if you really -- I'm really worried about the large amount of money involved in the push for more nuclear power plants.And **[#107 : Outside Scope-Safety]**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.

For example, how many of you know that the Vermont Yankee plant suffered a catastrophic failure of one of its cooling towers not long ago and thousands of gallons of water came rushing out? The NRC justified it by saying, Well, it wasn't really safety related. But you can see the pictures on the web. You can see a picture of that on the nukefreeTexas.org website.

The Harris Plant had a train wreck involving nuclear waste. Fortunately it happened on plant grounds. The train hopped the tracks after only a few feet.

But two that are security related from the last six months were the incursion at the Oak Ridge facility, which is not a nuclear power plant but a protected facility in Tennessee. Someone tried to run the gate at three in the morning. They were stopped by security guards, but the guy floored his car and got past the security guards and crashed into a barrier several hundred feet inside the plant.

The crack security team couldn't catch him. He escaped the facility and wandered around downtown Oak Ridge for a while until he was reported to the Oak Ridge police. They couldn't catch him either. This to me sounded like somebody testing security measures.

There was an even worse one at the Palo Verde plant a couple of months ago. A plant worker was stopped at the gates of the plant because the security guards noticed there

was a pipe bomb in the back of his pickup truck. He was questioned by the FBI for several days, finally released, and eventually the event was withdrawn from the NRC event report site because they determined, Well, he didn't really mean to blow up the plant. Someone put a pipe bomb in the bed of his truck. He almost got inside the nuclear power plant. And eventually the event report was withdrawn.

[#108 : Outside Scope-Safety]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.Thank you.

MR. CAMERON: Thank you. Mr. Singleton is right. All of that information is available to the public on the NRC website.

Mr. McCormick? And then Mr. McBurnett.

MR. McCORMICK: Good evening. I'll make this short, as I had a few comments. The more I hear the more comments I have and actually I'm sure everyone does.

[#109 : Outside Scope-Security and terrorism]But one 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.

And that is to me much more of a threat than a pipe bomb getting stopped at the gate of a nuclear power plant with primarily and secondary shields that are three feet thick.

[#110 : Outside Scope-Safety]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.

[#111 : Uranium Fuel Cycle]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 I challenge each and every one of us to think about this in relative terms.

The gentleman that just previously talked about the Manhattan Project -- those that are old enough to remember it or certainly have read about it -- that was probably one of the most successful endeavors this country every undertook. It developed the atom bomb, and it prevented probably World War II from two to three more years of fighting.

And that particular project went forward with many, many of the technologies weren't even invented when it got started. That was not a reason for them to not go forward, just because some technology wasn't available at the time. They had enough confidence that they felt that we would muster the energy to develop what was necessary to meet the goal.

I feel the same way about nuclear waste. That certainly is a major concern, 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.

[#112 : Support-Licensing Action]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.I thank you.

MR. CAMERON: Thank you very much, Mr. McCormick.

Mark McBurnett, vice president of regulatory affairs, Texas Nuclear Operating Company.

MR. MCBURNETT: Thank you. I'm Mark McBurnett, vice president of oversight and regulatory affairs with the South Texas Project Nuclear Operating Company.

[#113 : Socioeconomics]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.

I have a number of things, and I took a long list as I went through all the different details of each of the talks, and would really love to be able to stand up here and talk another 30 minutes and go through and counterpoint on each one of those, but that's not appropriate for this particular session tonight. But there are a few things I'd like to hit just to make sure they're clear.

[#114 : Uranium Fuel Cycle]First, nuclear waste? Yes, we 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.

[#115 : Outside Scope-Security and terrorism]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.

[#116 : Outside Scope-Security and terrorism]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.

[#117 : Health-Radiological]Worker exposure came up earlier. 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.

[#118 : Outside Scope-Safety]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.

[#119 : Outside Scope-Safety]However, the 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.

[#120 : Outside Scope-Safety]Low pressure turbine replacement -- I'm not sure how I get to that as a negative issue. You know, we 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.

[#121 : Land Use-Transmission lines]Power lines: 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.

[#122 : Alternatives-System Design]Ponds versus towers: Just to explain, the 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.

[#123 : Accidents-Severe]Don't think of it -- 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 provides for air conditioning. I would point out in a boiling water -- a boiling water reactor is a very robust design. Loss of that piece of equipment does not result in a catastrophic event for a boiling water reactor.

You know, we take our job and our role at South Texas very seriously. I am the individual who's responsible for submittal of the application to the Nuclear Regulatory Commission. We take it very serious to ensure that application met all the requirements that NRC established in the submittal. The fact that it was docketed demonstrates that we met that objective.

I'm also the man in charge of oversight and the quality programs ensuring that the plants are built in accordance with the requirements. I take those roles very seriously. My commitment to the citizens of Matagorda County, my friends and neighbors, as these plants will be built, built right, and operated well.

MR. CAMERON: Thank you. Next is Joe Sheppard, who's the chief nuclear officer for the South Texas Nuclear Operating Company.

MR. SHEPPARD: Thank you. And thank you for making it with us this long. I appreciate it.

I want to thank the NRC staff for conducting these meetings and these reviews. I want to thank all our neighbors for coming out tonight and spending this time with us. And I want to welcome our visitors. It's important to us that we have this dialogue. I know it's important to the NRC process, but it's also important to us.

I'm a native Texan. I grew up in the shadows of the petrochemical plants in Texas City, Texas. I have a vested interest in the environment. We are allowed to operate in Matagorda County by virtue of the laws that Congress has passed and the license that has been granted to us by the Nuclear Regulatory Commission. We also know that with that license comes a special trust and that we are responsible to the citizens of Texas and to the citizens of Matagorda County.

[#124 : Outside Scope-Safety]And the first responsibility is for safe operations. I think that our record demonstrates our 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.

[#125 : Socioeconomics]Units 1 and 2 provide clean, reliable power to millions of Texans. Mark talked about the economic engine that we need in Texas. Electricity is the foundation for that economic engine, and we're proud to be part of providing parts of that engine. We also provide millions of dollars of benefits to Matagorda County.

With respect to 3 and 4 we know that Units 1 and 2 and their safe, reliable operation are the enablers to be able to have the possibility of having 3 and 4. And so that redoubles our focus on safe, reliable operations.

Let me speak a minute about greenhouse gasses. Whether you believe that greenhouse gasses are contributing to the climate change or not, I think that it is just common sense that we don't need to have millions and millions of tons of carbon dioxide dumped into the environment.

[#126 : Meteorology and Air Quality]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.

We're in favor of efficiency also. Mark talked about replacement of our low pressure turbine rotaries. Replacement of the low pressure turbine rotaries added 140 megawatts onto the grid without any change in our reactor power. That's why we changed out those rotaries, for the efficiency.

[#127 : Alternatives-Energy]So we don't want to make a sucker's choice. 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.

Now, that study was done by the Germans, not necessarily known for being friendly to nuclear power. But that was their conclusion: same footprint.

[#128 : Site Layout and Design]Mark talked a little bit about the advanced boiling water reactor, which is what the proposed technology is for Units 3 and 4. This technology 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 choose 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.

I had the opportunity to tour two of the advanced boiling water reactors in Japan after the seismic even that occurred there in July. There was some concern about radiation doses, and Mark talked about the very low doses that are available in those facilities.

I climbed all over that plant. I went under the reactor vessel, normally one of the most dose-intensive parts of any nuclear power plant. At the conclusion of the tour I had received zero millirem. These are very, very well designed and well constructed plants.

At South Texas we strive to be a good corporate citizen. And we're very pleased with the support and the partnership that we have with the local community. And I think you've seen some of the eminence of that tonight. And I appreciate that.

[#129 : Socioeconomics]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.

Already, as D.C. Dunham talked about, is advanced education that's come to Bay City. And that's due to a partnership between industry, the local community colleges, the local community, and Texas A&M. We have a satellite campus of Wharton Junior College in Bay City. We're teaching courses today that are going to produce associate's degrees, and that is something that didn't exist one year ago.

We prefer to have local talent as part of our workforce, and this is one of the many activities that we have on going on to produce that talent and to have that pipeline into our facility.

At South Texas Project our vision is to improve lives through excellence in energy generation. We believe that we improve the lives of Texans by providing safe, clean, reliable, efficient electrical power to power that economic engine that's so vital to the Texas economy.

We believe we improve the lives of the community by the involvement of our citizens -- of our employees as citizens in the community, by being on the school boards, by being on the city councils, by heading up the charities, by making the investments in the community. And we believe we improve the lives of our employees by providing good careers, high wages, good benefits, and a very good work environment.

We're pleased to see you all here tonight. We look forward to the eventual licensing and construction of Units 3 and 4. Thank you very much.

MR. CAMERON: Okay. That's the last speaker at the NRC meeting. Can I just thank you from a facilitator's point of view. That was one of the more interesting comment sessions that I have been to. And I'm going to ask Nilesh, our senior NRC manager, to close the meeting for us.

Nilesh?

MR. CHOKSHI: Yes. I want to thank you again for allowing us to come to your community. And you are really helping us in fulfilling our responsibilities under the NEPA Act.

Not only you came here, but had very active participation. We got comments from the diverse perspective and on the diverse topics. We got comments on the broad policy

issues, programmatic and process aspects, and some very specific to our environmental and safety review.

And as I said in the beginning, we are here to listen. You know, it was not our intent to try to instantly react to any of this. We systemically are going to consider all of the comments received, both written, and then we are taking transcript, so we very carefully will evaluate all the different aspects and then consider them in our review.

So thank you for your participating and giving these comments. Thank you.

(Whereupon, at 10:09 p.m., the public hearing was concluded.)

STP-COL3&4-SC-00009 (Letter) [ML080460530]

Joy Lindsey
4142 Woodcraft St.
Houston , TX 77025
February 6, 2008

Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration, Mailstop T-6D59
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Chief:

[#1 Opposition-Licensing Action] I am writing to oppose any addition to the South Texas Nuclear plant in Bay City, Texas.

Federal Register/ Vol.72, No. 245/ Friday, December 21, 2007/Notices Page 72775

There are numerous reasons why the South Texas plant should, never have been permitted in the

first place and should not be expanded.

1) [#2 Benefit-Cost Balance] Nuclear power is not competitive with other forms of power generation and requires taxpayer dollars to subsidize.

2) [#3 Need for Power] It has not been shown that there is a need for this expansion.

3) [#4 Uranium Fuel Cycle] How can the generation of waste which we still do not know how to safely store be justified?

4) [#5 Outside Scope-Safety] 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.

5) [#6 Outside Scope-Safety] Much shoddy workmanship was exposed in the original construction of the South Texas Nuclear Plant.

Here's a relevant reminder from Associated Press in 2004:

In all, 7 million people in the former Soviet republics of Belarus, Russia and Ukraine are estimated to suffer physical or psychological effects of radiation related to the April 26, 1986, catastrophe, when reactor No. 4 in Chernobyl exploded and caught fire.

An area half the size of Italy was contaminated, forcing hundreds of thousands of people to be resettled and ruining some of Europe's most fertile agricultural land, the United Nations said.

[#7 Alternatives-Energy] Why do we consider such a costly, potentially destructive, and unnecessary project instead of employing more benign solutions such as conservation, wind, and solar?

Please enter my objections to this expansion,

Sincerely,

Joy Lindsey

STP-COL3&4-SC-00010 (Letter) [ML080640543]

Texas Public Citizen's Texas Office
Award Winning Advocacy
Public Citizen Texas office: Air Quality 2oo6 Conference "Outstanding Non-Profit Organization Award"
Tom "Smitty" Smith, State Director: Campaign for People's "Thomas Paine Award"
U.S. EPA's "Award of Excellence"
2001Austin Chronicle Best of Austin "Best People's Lobbyist"
Public Citizen's Solar Austin Campaign: Livable City "Vision Award"
Interstate Renewable Energy Council "Innovation Award"
2004 Austin Chronicle Best of Austin "Best Grassroots Effort"
Texas Renewable Energy Industries Association "Special Recognition Award"

To: Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration, Mailstop T-6D59
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001
From: Public Citizen, Texas Office
1002 West Ave, Suite 300
Austin, TX 78701

Re: Comments on the Environmental Impacts of the Application for STP Units 3 and 4

Federal Register/ Vol.72, No. 245/ Friday, December 21, 2007/Notices Page 72775

18 February 2008

To Whom It May Concern:

Attached please find comments submitted on behalf of Public Citizen's Texas Office, as well as 4 reports referenced in the comments. The reports are:

* 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.

* Power to Save in Texas, by Optimal Energy, Inc. Prepared for Natural Resources Defense Council and Ceres, January, 2007.

* Western Governor's Association Policy Recommendations for Energy Efficient Buildings, January 2008.

* City Public Service Technical and Economic Energy Efficiency Potential Study, prepared for City Public Service, KEMA, Inc. 2004.

Thank you.

Comments on the Environmental Impacts in the Application for the South Texas Nuclear Plant Submitted to the NRC By Public Citizen's Texas Office and the SEED Coalition on February 18th 2008

There are many significant environmental impacts that we suggest the NRC ask to have evaluated in the Environmental Impact Statement on the proposed South Texas Project Units 3 & 4.

1. Local Economy

[#1 Socioeconomics] 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?

2. Employment

[#2 Socioeconomics] 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?

3. Health

[#3 Health-Radiological] 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.

1. According to Joseph Mangano of the Radiation and Public Health Project, the cancer death rate in the three counties closest to STNP was 4.5% below the statewide rate before STNP began operating. Sixteen years later, the rate in the three counties is 7.2% higher than the state rate. While the state rate rose 3.8% in those years, the three counties' rate went up 16.55%.

2. The National Academy of Sciences concluded that radiation is dangerous even at low levels (BEIR VII study).

3. While low-level radiation exposure is not as damaging as high-level radiation on a short-term basis, prolonged exposure to low-level can be just as damaging to humans. Research has shown an increase in cancer rates around nuclear plants.

4. Will the two new reactors increase the amount of low-level radiation exposure to surrounding populations?

4. Water

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.

1. [#4 Hydrology-Surface Water] If the plant uses its full allotment, will there be adequate water for the new reservoir?

2. [#5 Hydrology-Surface Water] 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?

3. The consumptive or evaporative use is about 240 gallons per minute (gpm) per unit. The overall flow is over 1.2 billion gpm per unit. Groundwater is projected to be the main source of makeup water for the STP 3 & 4 Ultimate Heat Sink, condensate makeup, radwaste and fire protection systems and the source of potable water for STP 3 & 4. These systems are predicted to require a typical groundwater consumption rate of approximately 1,738 acre-ft per year (1,077 gpm), whereas the peak consumption (i.e., outages) is expected to be as great as 3935 gpm. STPNOC is currently permitted to use up to 3,000 acre-ft of groundwater. Current annual groundwater use by STP 1 & 2 is between 1,200 and 1,300 acre-feet. Therefore, over 1,700 acre-ft (1050 gpm) of groundwater could be available for use by STP 3 & 4. Water demand could be met by increasing the yield of the existing wells or installing new wells with the objective that total STP use would not exceed the 3,000 acre-ft per year permitted amount.

4. [#6 Hydrology-Surface Water] If it takes its full allotment of 3,935 gallons per minute will there be adequate water for rice farmers and others?

5. Global Warming

If global warming is occurring and as severe as we anticipate:

" [#7 Hydrology-Surface Water] Will there be enough water for cooling decline if a 25% decrease in river flows occurs?

" [#8 Hydrology-Groundwater] Will groundwater decline?

" [#9 Hydrology-Surface Water] Will the cooling water be cool enough to allow the plant to operate?

" [#10 Hydrology-Surface Water] 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?

2

Table 3A.3
Average Predicted Monthly MCR Temperature for 2003-2005
(Based on 4-Unit Operation)
CWS Intake Average Monthly
Temperature (OF)
1*
Year
Month 2003 2004 2006
Jan 70.00 71.3 71.7
Fab 70.82 69.9 72,0
Mar 75.38 78.1 76.7
Apt 80.51 81.8 81.0
May 88.17 85.9 85.8
Jun 93.57 92.2 92.2
Jul 95.88 95.0 94.4
Aug 95.23 94.0 95.0
SOp 91.67 91.8 92.8
Oct 85.80 87.4 85.3
Nov 79.99 78.8 78.7
Doc 71.62 71.3 68.1
CWS Discharge Average
Monthly Temperature (OF)
YWar
Month 2003 2004 2005
Jan 88.4 89.7 90.0
Fob 89.2 88.3 90.4
'Mar 93.7 96.5 95.1
Apr 97.4 98.7 97.9
May 104.6 102.3 102.2
Jun 110.0 108.6 108.6
Jul 112.3 111.4 110.8
Aug 111.6 110.4 111A
Sep 108.1 108.1 109.2
Oct 103.3 104.9 102.8
Nov 98.3 97.1 97.0
D[c 90.0 89.7 86.A

* Plants in Germany, France and the Southeastern United States had to shut down operations the last several summers due to high temperatures and drought.

* [#11 Hydrology - Surface Water] If global warming increases sea level rise by 7 meters - will STNP be within the storm surge zone?

6. Hurricanes

Exelon considered building a new nuclear plant on the shore, but ended up choosing Victoria as their site in order to prepare for a 20-30 ft. storm surge, yet NRG still plans to add more units to STP.

1. [#12 Outside Scope-Emergency Preparedness] There is no threat assessment for Category 4 or 5 hurricanes.

2. [#13 Outside Scope-Emergency Preparedness] 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?

3. Hurricane Carla, which struck Texas in 1961, was at one point a category 5 hurricane.

" Although it struck the Texas coast as a Category 4 hurricane, it was one of the most powerful storms ever to strike the United States.

" During the hurricane, rainfall amounts were heaviest from Port Lavaca up the coast to Galveston and within 50 miles inland, ranging from 10" to 16". One report out of Port Lavaca had a tide level 18.5" above normal.

4. [#14 Outside Scope-Emergency Preparedness] 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.

5. 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?

6. Could emergency personal enter the grounds?

7. Evacuation plans

[#15 Outside Scope-Emergency Preparedness] 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.

8. Credible Accidents

[#16 Accidents-Design Basis] 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.

9., Endangered Species

[#17 Ecology-Terrestrial] There are Kemp Ridley sea turtles and whooping cranes in the vicinity.

1. How will construction and operation of the new reactors affect their habitats?

[#18 : Health-Radiological] 2. What is the effect of low-level radiation over prolonged periods on wildlife in the area?

[#17, Part 2] 3. What other species will be affected?

10. [#19 Uranium Fuel Cycle] Waste: 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.

1. The TCEQ has said the application for a low-level waste site is incomplete.

2. The contractor at Yucca Mountain has announced layoffs. Ken Ritter of the Associated Press wrote: "The Energy Department is cutting operations and the chief contractor is laying off its staff at the desert site where the government plans to build a national nuclear waste repository..." Jan 8, 2008.

11. Need for Power: The need has not been demonstrated

[#20 Need for Power] 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;

3. [#21 Need for Power] 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.

4. [#22 Need for Power] 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.

Figure 3-1
Technical and Economic Potential
Demand Savings, 2014
Figure 3-2
Technical and Economic Potential
Energy Savings, 2014
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it 1.000

*Technical Economnic

Power to Save in Texas, by Optimal Energy, Inc. Prepared for Natural Resources Defense Council and Ceres, January, 2007; Western Governor's

Association Policy Recommendations for Energy Efficient Buildings, January 2008. See Attachments

2 City Public Service Technical and Economic Energy Efficiency Potential Study, prepared for City Public Service, KEMA, Inc. 2004. See

Attachments.

5

6

12. Contamination from Uranium

[#23 Uranium Fuel Cycle] 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.

1. In the last ten years, the Texas Department of Health Services has cited several instances of radioactive waste spills by uranium mining companies, including Cogema Inc.'s 1998 spill of over 20,000 gallons of radioactive solution in Bruni, Texas.

2. The Environmental Protection Agency has warned residents of Kleberg County that their groundwater currently contains unsafe levels of uranium, and strongly advises against drinking it.

3. Residents of Goliad and Kleberg counties have both publicly opposed the continued operations of mining companies in their communities.

4. The aquifer below Kames County has been contaminated by uranium mill tailings. The Department of Energy estimates clean up will cost $348 million but, according to a Texas Department of Agriculture report, will not implement the clean up plan.

Attachments:

" 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.
* Power to Save in Texas, by Optimal Energy, Inc. Prepared for Natural Resources Defense Council and Ceres, January, 2007.
* Western Governor's Association Policy Recommendations for Energy Efficient Buildings, January 2008.
" City Public Service Technical and Economic Energy Efficiency Potential Study, prepared for City Public Service, KEMA, Inc. 2004.

STP-COL3&4-SC-00011 (Letter) [ML080640196]

NANCY C. RUSSELL, DR.P.H.
9714 BASSOON DR
HOUSTON, TX 77025

February 13, 2008

Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration, Mailstop T-6D59
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

To Whom It May Concern,

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.

Sincerely,

Nancy C. Russell, Dr. P.H.

nanrussl@comcast.net

STP-COL3&4-SC-00012 (Letter) [ML080640197]

Naticy Edwardscl,1r,
10601 Baboon Drive.
HoustonI TX 77025
713-661-9737

Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration, Mailstop T-6D59
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Chief:

[#1 Opposition-Licensing Action] I am writing to oppose the addition of Units 3 and 4 to the South Texas Nuclear plant in Bay City, Texas.

Federal Register/ Vol.72, No. 245/ Friday, December 21, 2007/Notices Page 72775

[#2 Opposition-Nuclear Power] 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. #3 Benefit-Cost Balance] Nuclear power still requires Federal subsidies to make it competitive with other forms of power generation. [#4 Opposition-Nuclear Power] 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. [#5 Uranium Fuel Cycle] There is still no ways to safely store nuclear waste for the millions of years during which it will remain radioactive.

[#6 Alternatives-Energy] Texas needs more non-poluting sourcesof electricity such as wind and solar. Utilities also should promote energy conservation as a way to avoid new construction of power plants.

[#7 Opposition-Nuclear Power] 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.

Please enter my objections to this expansion, ... ,,"-.....

Nancy Edwards : ""S.

STP-COL3&4-SC-00013 (Letter) [ML]

MAR-17-2008 11:30

To: The Nuclear Regulatory Commission
From: Polly Hearn. Kay O. lawson, Roberta Ripke, Debbie Morris
Palacios,Texas residents
Re: South Texass Nuclear Project. For the Record

Dear Commission Members.

[#1 Support-Plant] 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.

[#2 Socioeconomics] 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. [#3 Support-Licensing Action] STP's expansion plans allow a positive regional impact on the United States energy crises without disrupting important migratory wildlife patterns.

[#4 Support-Licensing Action] 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.

[#5 Support-Licensing Action] 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.

Sincerely,
P~JlyH,arn
206 BtISOn Ave.
Palacios. Texas

STP-COL3&4-SC-00014 (Letter) [ML]

February 5, 2008

From: Stephen H. Kale, 3d10 Sable Crossing, San Antonio, TX 78232

Stephen.kale@sbqgIQbal.net

To: U.S. Nuclear Regulatory Commission

Subject: Environmental Seoping for South Texas Project New Reactor Application

My name is Stephen Kale. I am a resident in the City of San Antonio, Texas. In accordance with the NRC's notice of January 7,2008, I appreciate this opportunity to submit the following environmental scoping comments for consideration by the NRC.

I congratulate CPS Energy for its forwarding looking Windtricity and Conservation programs; In response to these programs, I have installed in my home the CPS load reducing thermostat, a solar powered attic ventilator, and I have purchased a kilowatt of wind produced eledricity. My home has modem insulation and low emissivity windows. However, these steps by individual home owners are surely not enough to meet the future electricity needs of South Texas.

Paragraphs 51.71 anCl 51.75 of 10 CFR 51 state that the contents of the draft environmental impact statement will include, among other things, "...consideration of the economic, technical, and other benefits and ccsts of the proposed action and alternatives and indicate what other interests and consideration of Federal policy, including factors not related to environmental quality if applicable are relevant to the consideration of environmental effects of the proposed action...".

Based on these requirements, I believe that the draft environmental impact statement (EIS) should evaluate on equivalent bases how the proposed action and alternatives meet the following four criteria:

1. [#1 Outside Scope-Miscellaneous] 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.

2. [#2 Need for Power] 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.

3. [#3 Benefit-Cost Balance] 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.

4. [#4 Alternatives-Energy] 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.

I appreciate this opportunity to provide these comments to the NRC.

STP-COL3&4-SC-00015 (Letter) [ML]

COASTAL BEND GROUP
SIERRA CLUB
P.O. BOX 3512
CORPUS CHRISTI, TX 78404

Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration
Mailstop T-6D59
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

POSITION STATEMENT: OPPOSITION TO EXPANSION OF STP

[#1 Opposition-Licensing Action] The Coastal Bend Sierra Club joins the state-level Lone Star Sierra Club in opposing the expansion of STP.

Some of the reasons for our opposition follow:

• [#2 Uranium Fuel Cycle] 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).

• [#3 Opposition-Nuclear Power] 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 of the existing product poses a real threat of contamination of aquifers with radionuclides and heavy metals which have previously been dormant for millions of years.

• [#4 Benefit-Cost Balance] 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).

• [#5 Outside Scope-Security and terrorism] 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.

• [#6 Hydrology-Surface Water] 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.

• [#7 Accidents-Severe] Nuclear power plants are not safe. Regardless of the 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 of the fuel cvcle in these power plants.

[#8 Alternatives-Energy] 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."

[#9 Alternatives-Energy] Additionally, according 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. What many citizens may not be aware of is that scientists and engineers are on the brink of solving a few technical problems which will bring these newest renewable energy power sources into economic feasibility in the near future.

[#10 Opposition-Nuclear Power] 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 of thousands 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).

[#11 Benefit-Cost Balance] 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).

Mina G. Williams, Vice-Chair, Coastal Bend Sierra Club

February 5, 2008

STP-COL3&4-SC-00016 (Letter) [ML]

MATAGORDA COUNTY
NATE McDONALD
COUNTY JUDGE

January 31, 2008

To the Nuclear Regulatory Commission and Citizens of Matagorda County:

[#1 Support-Plant] 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.

This company bas been an excellent partner for Matagorda County for over two decades, and participates fully in the life of our county, as we work together to advance the quality of life. They consistently participate in the initiatives we undertake, such as United Way, Mid-Coast Education Alliance and Emergency Planning. [#2 Outside Scope-Emergency Preparedness] Speaking of Emergency Planning, 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.

[#3 Support-Plant] That in a nutshell sums up the STNP credo, as I have observed it... a commitment to excellence in all that they undertake.

I must apologize for not being present this evening; however, I am in Emmitsburg, Maryland, taking an Emergency Management course so that I too am prepared to safeguard our citizens' health and welfare.

Thank you for your attention and attendance this evening.

Sincerely,

Nate McDonald

Matagorda County Judge

1700 Seventh Street, Room 301 • Bay City. TX 77414 • (979) 244-7605 • Fax (979) 245-3697

STP-COL3&4-SC-00017 (Letter) [ML]

Chief, Rules and Directives Branch
Division of Administrative Services
Office of Administration
Mallstop T-6D59
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

February 5, 2008

COMMENT AT NRC MEETING IN BAY CITY RE STP EXPANSION

My name is Venice Scheurich. I am Conservation Chair of the Coastal Send Sierra Club, and in that role I often write or speak on behalf of that organization. However, the following comments are personal: My husband and I own land in two nearby counties, Karnes and DeWitt. Most of you probably know that Karnes County has a long and sad history of environmental degradation due to uranium mining. In neighboring DeWitt County, companies are beginning to show an interest in leasing land for uranium exploratlon. Because company representatives are making an effort to convince landowners that America needs locally mined uranium to supply existing and soon-to-be built nuclear power plants, my husband and I have followed closely the debate of the advantages and disadvantages of the resurgence of uranium mining and nuclear power plant expanslon.

We have several major concerns, most of which have been or will be effectively expressed by others speaking here today. However, there are two areas of concern to us on which I wish to place additional emphasis:

1. [#1 Hydrology-Surface Water] It has long been common knowledge that vast amounts of water are required for cooling nuclear reactors. For example, 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. However, if it is common knowledge, we have not found 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. Further, **[#2 : Hydrology-Groundwater]** 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.

2. [#3 Uranium Fuel Cycle] 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. [#4 Health-Radiological] However, what may not be such common knowledge is that just two months ago, 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.

[#5 Opposition-Licensing Action] 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.

Venice Scheurich

P.O. Box 10101

Corpus Christi, TX 78460

STP-COL3&4-SC-00018 (Email) [ML]

SOUTHWEST WORKERS' UNION
Executive Board
President: **Eloy Contreras**
Vice-President: **Helen Winslow**
Secretary: **Willie Stamps**
PO Box 830706 San Antonio, TX 78283
Ph. 210..299.2666 Fx 210..299.4009
www.swunion.org

February 18, 2008

Chief, Rules and Directives Branch Division of Administrative Services Mailstop T-6D59

U.S. Nuclear Regulatory Commission Washington, DC 20555-0001

Sent via e-mail at STP_COL@nrc.gov

RE: Comments on the scope of the Environmental Impact Statement for South Texas Project reactors 3 & 4

Dear Nuclear Regulatory Commission:

Southwest Workers Union is a non-profit, membership-based organization in San Antonio, TX representing 2,500 low income families. [#1 : Outside Scope-Miscellaneous]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. [#2 : Process-NEPA]We also deserve and request that the NRC conduct public hearings in San Antonio on those alternatives and the environmental impacts of STP 3 & 4 as part of the scoping process.

[#3 : Alternatives-Energy]

In the current application, it states that the purpose of STP 3 & 4 "is to sell baseload power on the wholesale market" and that demand side management initiatives such as conservation and efficiency programs therefore do not serve the purpose of the project and are not reasonable alternatives (Section 9.2.1.3). However selling power on the wholesale market is not the objective of CPS Energy, a municipally-owned utility who is currently projected to be a 50% owner of the two additional reactors at STP. 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.

[#4 : Alternatives-Energy]
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. Despite this, CPS has currently dedicated only $96 million over a four year period to energy efficiency measures, a fraction of the $206 million allocated just for initial site design of STP 3 & 4.

[#5 : Alternatives-Energy]

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. [#6 : Outside Scope-Miscellaneous] 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.

STP-COL3&4-SC-00019 (Letter) [ML080840434]

[#1 : Support-Plant]STP has safely generated/operated nuclear reactors for 20+ years without incident. There has been no adverse environmental impact during this time. **[#2 : Support-Licensing Action]**Originally the site was designed for two additional reactors. Given the original design and past record it seems that the license should be granted.

[#3 : Support-Plant]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.

STP-COL3&4-SC-00020 (Letter) [ML080840435]

[#1 : Process-NEPA]

justifies moving forward - NEPA requirements

STP SCOPING COMMENT DOCUMENTS

PNNL TRACKING #	NAME	DATE	ML #
1	Timothy Ryan	02/07/08	ML081140368
2	Lanny Sinkin	02/18/08	ML081140367
3	Cyrus Reed, Sierra Club	02/18/08	ML081140366
4	Lanny Sinkin (supplement)	02/18/08	ML081140364
5	Cameron Payne	02/18/08	ML081420662
6	Matthew Johnson	02/19/08	ML081140369
7	Afternoon Transcript	02/05/08	ML080950499
8	Evening Transcript	02/05/08	ML080950504
9	Joy Lindsey	02/14/08	ML080460530
10	Public Citizen	02/21/08	ML080640543
11	Nancy Russell	02/26/08	ML080640196
12	Nancy Edwards	02/26/08	ML080640197
13	Polly Hearn	02/08/08	ML080840439
14	Stephen Kale	02/05/08	ML080840438
15	Mina Williams	02/05/08	ML080840436
16	Nate McDonald, Judge	01/31/08	ML080840425
17	Venice Scheurich, Sierra Club	02/05/08	ML080840437
18	Lara Cushing, Southwest Workers Union	02/18/08	ML081140370
19	Mike Griffith	02/05/08	ML080840434
20	Karen Hadden	02/05/08	ML080840435

STP-COL3&4-SC Comment Subject Binning

- **STP-COL3&4-SC-00001 (Email) [ML]**
  - **1 : Opposition-Licensing Action**

    ... you are failing to carry out your charter of protecting the safety and health of US citizens.

- **STP-COL3&4-SC-00002 (Email) [ML]**
  - **1 : Process-ESP-COL**

    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

  - **2 : Outside Scope-Safety**

    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. â€œExelon Nuclear not coming to Matagorda County,â€ 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).

- **3 : Meteorology and Air Quality**

  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.

- **4 : Meteorology and Air Quality**

  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

- **5 : Meteorology and Air Quality**

  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.

- **6 : Hydrology-Surface Water**

  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

- **7 : Outside Scope-Emergency Preparedness**

  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

- **8 : Outside Scope-Emergency Preparedness**

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?

- **9 : Outside Scope-Safety**

  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.

- **10 : Outside Scope-Safety**

  The potential exists for more frequent and more powerful tornadoes. That potential should be examined in the EIS.

- **11 : Hydrology-Surface Water**

  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?

- **12 : Outside Scope-Miscellaneous**

  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.

- **13 : Hydrology-Surface Water**

  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.

- **14 : Outside Scope-Miscellaneous**

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.

- **15 : Outside Scope-Miscellaneous**

  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.

- **16 : Hydrology-Surface Water**

  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.

- **17 : Accidents-Severe**

  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.

- **18 : Health-Radiological**

  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.

- **19 : Outside Scope-Safety**

  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.

- **20 : Health-Radiological**

  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

- **21 : Health-Radiological**

  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.

- **22 : Uranium Fuel Cycle**

  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.

- **23 : Outside Scope-Security and terrorism**

  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.

- **24 : Uranium Fuel Cycle**

  The low level waste analysis should examine the likelihood of off-site storage being available for such waste.

- **25 : Benefit-Cost Balance**

  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.

- **26 : Decommissioning**

  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.

- **27 : Uranium Fuel Cycle**

  Waste produced from uranium mining, including tailings, is another waste which should be included in the analysis.

- **28 : Opposition-Nuclear Power**

  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?

- **29 : Alternatives-Energy**

  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.

- **30 : Alternatives-Energy**

  One of the applicants, CPSEnergy, has reclassified energy conservation as power

generation. This essentially treats energy conservation approaches the same as baseload.

- **31 : Alternatives-Energy**

  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?

- **32 : Benefit-Cost Balance**

  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.

- **33 : Alternatives-Energy**

  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 â€œsmall

is beautifulâ€ 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.

- **34 : Alternatives-Energy**

  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.

- **35 : Outside Scope-Security and terrorism**

  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.

- **36 : Alternatives-Energy**

  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.

- **37 : Outside Scope-NRC Oversight**

  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.Â Â 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.Â (5) With

hundreds retiring, the new personnel will have to be trained to take on significant responsibilities very quickly.Â (6) Newly trained personnel will take on significant responsibilities after only a short tenure in the agency.Â (7) Applications for new licenses are flooding in. The passage of loan guarantees set off a â€œgold rushâ€ 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.Â (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.Â (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.Â (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.Â (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.Â <font style="background-color: #ffff99">(12) There may be licensing proceedings opened up for the Yucca Mountain high level waste storage facility. The proceeding

- **38 : Outside Scope-NRC Oversight**

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.

- **STP-COL3&4-SC-00003 (Email) [ML]**
  - **1 : Process-ESP-COL**

    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.

  - **2 : Alternatives-Energy**

    [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.

  - **3 : Opposition-Licensing Process**

    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.

  - **4 : Benefit-Cost Balance**

    Failure toÂ provide financial information needed for true alternative analysis:Â the applicant has asked for and the NRC has granted an exemption to disclosing basic

financial information about the proposal.Â Â 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.Â Â 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.

- **5 : Outside Scope-Miscellaneous**

  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.

- **6 : Benefit-Cost Balance**

  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.

- **7 : Benefit-Cost Balance**

  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.

- **8 : Benefit-Cost Balance**

  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.

- **9 : Need for Power**

  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].Â Â [I]t is quite likely that the future of peak and load demand will look quite differently then that presented by the applicant.

- **10 : Need for Power**

  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.

- **11 : Alternatives-Energy**

  [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.

- **12 : Benefit-Cost Balance**

  [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.

- **13 : Need for Power**

  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.

- **14 : Need for Power**

  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.

- **15 : Alternatives-Energy**

  [A]n EIS should not only assess the â€œno actionâ€□, â€œbuilding nuclear plant at Bay Cityâ€□ or â€œbuilding it somewhere else,â€□ 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.

- **16 : Alternatives-Energy**

  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.

- **17 : Need for Power**

  ER Chapter 9 states â€œNRG anticipates it would not be able to provide competitively priced power if it had to retain an extensive conservation and load modification incentive programâ€ 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.

- **18 : Alternatives-Energy**

  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.

- **19 : Alternatives-Energy**

  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.

- **20 : Alternatives-Sites**

  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.

- **21 : Outside Scope-Miscellaneous**

  [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.Â [3] and 4? Could a problem at the new plant lead to a shut down or problem with the existing plants?

- **22 : Outside Scope-Safety**

  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?

- **23 : Uranium Fuel Cycle**

  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.

- **24 : Outside Scope-Miscellaneous**

  [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.

- **25 : Hydrology-Surface Water**

  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.

- **26 : Hydrology-Surface Water**

  [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.

- **27 : Outside Scope-Miscellaneous**

  [A]ny EIS must address the proposed water rights permit being sought by LCRA for the so-called â€œexcessâ€ 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.

- **28 : Hydrology-Surface Water**

  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.

- **29 : Hydrology-Surface Water**

  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 â€œdrought of recordâ€ 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.

- **30 : Ecology-Aquatic**

  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.

- **31 : Ecology-Aquatic**

  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.

- **32 : Meteorology and Air Quality**

  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.

- **33 : Outside Scope-Safety**

  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.

- **34 : Ecology-Aquatic**

  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.

- **35 : Uranium Fuel Cycle**

  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.

- **36 : Uranium Fuel Cycle**

  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.

- **37 : Uranium Fuel Cycle**

  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.

- **38 : Outside Scope-Safety**

  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.

- **39 : Outside Scope-Safety**

  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.

- **40 : Outside Scope-Safety**

  [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.

- **41 : Meteorology and Air Quality**

  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.

- **42 : Uranium Fuel Cycle**

  [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.

- **43 : Uranium Fuel Cycle**

  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.

- **44 : Outside Scope-Security and terrorism**

  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.

- **45 : Accidents-Severe**

  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.

- **46 : Health-Radiological**

  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.

- **STP-COL3&4-SC-00004 (Email) [ML]**
  - **1 : Alternatives-Energy**

    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 â€œSilicon Valley Turns its Face to the Sunâ€ 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.

  - **2 : Uranium Fuel Cycle**

    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 â€œAs Nuclear Waste Languishes,

Expense to U.S. Rises,â€ New York Times, February 17, 2008.

- **STP-COL3&4-SC-00005 (Email) [ML]**
  - **1 : Outside Scope-Safety**

    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.

  - **2 : Outside Scope-Safety**

    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.Â Â [The damage that resulted from the earthquake] hardly lend confidence to the ABWR design proposed by STP.

  - **3 : Accidents-Severe**

    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.

  - **4 : Accidents-Severe**

    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.

- **5 : Accidents-Severe**

  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.

- **6 : Ecology-Aquatic**

  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.

- **STP-COL3&4-SC-00006 (Email) [ML]**
  - **1 : Outside Scope-Miscellaneous**

    [E]mailed comments sent to STP_COL@nrc.gov were returned as

undeliverable due to an undisclosed size limit.Â 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.

- **STP-COL3&4-SC-00007 (Meeting Transcript) [ML080950499]**
  - **1 : Support-Plant**

    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.

  - **2 : Support-Nuclear Power**

    I support, personally, clean and safe nuclear energy.

  - **3 : Support-Nuclear Power**

    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.

  - **4 : Support-Nuclear Power**

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.

- **5 : Support-Plant**

  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.

- **6 : Outside Scope-Security and terrorism**

  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.

- **7 : Support-Licensing Action**

  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.

- **8 : Support-Licensing Action**

  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.

- **9 : Socioeconomics**

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.

- **10 : Support-Plant**

  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.

- **11 : Support-Licensing Action**

  I urge you to grant the license for 3 and 4.

- **12 : Support-Plant**

  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.Â It's good for us, it's a good place, they've been good neighbors.

- **13 : Outside Scope-Security and terrorism**

  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.

- **14 : Support-Licensing Action**

  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.

- **15 : Outside Scope-NRC Oversight**

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

- **16 : Socioeconomics**

  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.

- **17 : Health-Radiological**

  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.

- **18 : Hydrology-Surface Water**

  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?

- **19 : Outside Scope-Safety**

  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?

- **20 : Outside Scope-Safety**

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?Â Â And in this particular community, will you be able to get out in time?

- **21 : Ecology-Terrestrial**

  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.

- **22 : Uranium Fuel Cycle**

  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.

- **23 : Hydrology-Groundwater**

  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?

- **24 : Transportation**

  Transportation, how will the materials and the waste come in and out of this community?

- **25 : Environmental Justice**

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

- **26 : Uranium Fuel Cycle**

  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.Â Â 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.

- **27 : Need for Power**

  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.Â And what we're seeing here in this particular analysis that has been presented to you all, is that the applicant saysÂ we need the plant for baseload.Â And it's impossible to really utilize other resources like energy efficiency and renewable energy as base load.

- **28 : Alternatives-Energy**

  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.

- **29 : Socioeconomics**

  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?

- **30 : Opposition-Nuclear Power**

  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.

- **31 : Uranium Fuel Cycle**

  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.

- **32 : Outside Scope-Miscellaneous**

  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.

- **33 : Outside Scope-Security and terrorism**

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

- **34 : Outside Scope-Miscellaneous**

  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.Â 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.

- **35 : Process-ESP-COL**

  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.

- **36 : Process-ESP-COL**

  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.

- **37 : Outside Scope-Safety**

  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.

- **38 : Process-ESP-COL**

  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.

- **39 : Process-ESP-COL**

  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.

- **40 : Process-ESP-COL**

  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.

- **41 : Support-Licensing Action**

  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.

- **42 : Process-ESP-COL**

  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.

- **43 : Need for Power**

  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.

- **44 : Alternatives-Energy**

  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.

- **45 : Hydrology-Surface Water**

  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.

- **46 : Outside Scope-Safety**

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

- **47 : Hydrology-Surface Water**

  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.

- **48 : Hydrology-Surface Water**

  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.

- **49 : Hydrology-Surface Water**

  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.

- **50 : Outside Scope-Safety**

  [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.

- **51 : Uranium Fuel Cycle**

  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.

- **52 : Uranium Fuel Cycle**

  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?

- **53 : Outside Scope-Security and terrorism**

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

- **54 : Uranium Fuel Cycle**

  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?

- **55 : Uranium Fuel Cycle**

  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.

- **56 : Outside Scope-Security and terrorism**

  ...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.

- **57 : Uranium Fuel Cycle**

  [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.

- **58 : Alternatives-Energy**

  -- 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.

- **59 : Opposition-Nuclear Power**

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

- **60 : Opposition-Licensing Action**

  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. ...Â 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.

- **61 : Outside Scope-Miscellaneous**

  [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.Â 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.Â And so I'mÂ 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.

- **62 : Cumulative Impacts**

  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?

- **63 : Meteorology and Air Quality**

  [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.

- **64 : Transportation**

  [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.

- **65 : Opposition-Nuclear Power**

  [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.

- **66 : Uranium Fuel Cycle**

  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.

- **67 : Support-Licensing Action**

And as an economic developer, many of us only get to experience this kind of expansion once in a life time.Â So it's real important that we take advantage of the opportunities that have been put in front of us.

- **68 : Socioeconomics**

  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.Â 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.

- **69 : Support-Licensing Action**

  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.

- **70 : Support-Plant**

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

- **71 : Socioeconomics**

  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.Â 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.

- **72 : Socioeconomics**

  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.Â 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.

- **73 : Socioeconomics**

  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.Â ...[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.

- **74 : Socioeconomics**

  [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.

- **75 : Support-Plant**

  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.Â Individually they provide strong support within our churches, our civic organizations, our youth and environmental activities, school districts, and in our governmental units.

- **76 : Outside Scope-Emergency Preparedness**

  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.

- **77 : Support-Licensing Action**

  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.

- **78 : Opposition-Licensing Action**

  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.

- **79 : Hydrology-Surface Water**

  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.

- **80 : Outside Scope-Safety**

  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.

- **81 : Meteorology and Air Quality**

  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.

- **82 : Meteorology and Air Quality**

  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.Â 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.

- **83 : Uranium Fuel Cycle**

  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.

- **84 : Benefit-Cost Balance**

  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.

- **85 : Opposition-Nuclear Power**

  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.

- **86 : Uranium Fuel Cycle**

  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.

- **87 : Alternatives-Energy**

  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.Â 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.

- **88 : Opposition-Nuclear Power**

  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.

- **89 : Alternatives-Energy**

  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."Â 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.

- **90 : Alternatives-Energy**

  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.

- **91 : Alternatives-Energy**

  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.Â 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.

- **92 : Benefit-Cost Balance**

  [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.Â Â And one of the reasons why the true

costs of nuclear are never evaluated is because NRC only looks at a small price.Â 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.

- **93 : Meteorology and Air Quality**

  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.

- **94 : Transportation**

  [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?Â 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?

- **95 : Uranium Fuel Cycle**

  <p>[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.Â 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. </p> 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.

- **96 : Socioeconomics**

  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.

- **97 : Uranium Fuel Cycle**

  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.

- **98 : Uranium Fuel Cycle**

  I am going to talk thinking of the hundreds of generations that are going to come after me that are going to be struggling with trying to contain the deadly radioactive waste that will be coming out of these plants, and struggling with trying to understand why we chose this path when other paths were available to us.

- **99 : Alternatives-Energy**

  [W]e deserve a full environmental impact statement that gives efficiency, combined heat and power, renewable energy sources

like solar, wind, geothermal, just as much investment in terms of money, in terms of time, in terms of expertise that this nuclear proposal has gotten.

- **100 : Uranium Fuel Cycle**

  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.

- **101 : Alternatives-Energy**

  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.

- **102 : Health-Radiological**

  I do want to go on record and say that I am concerned about increased cancer rates

- **103 : Uranium Fuel Cycle**

  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.

- **104 : Outside Scope-Safety**

  I am concerned about the design of the new units

- **105 : Socioeconomics**

  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.

- **106 : Socioeconomics**

  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.

- **107 : Outside Scope-Security and terrorism**

  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.

- **108 : Socioeconomics**

  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.

- **109 : Socioeconomics**

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.

- **110 : Opposition-Plant**

  I'd like to say to my elected officials, I'm greatly concerned by your apparent willingness to turn a blind eye to all sides of this issue, except those sides that are spun by STP's massive public relations machine. Before you grant tax abatements and surrender the key to the city, remember back to what kind of neighbor they were immediately before these expansion plans came about. Remember how far they were willing to stray from the original promises made when Units 1 and 2 were built, when it benefitted their bottom line.

- **111 : Outside Scope-NRC Oversight**

  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.

- **112 : Health-Radiological**

  <p>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.Â 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.Â   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.Â That could be happening right here. That concerns me. That bothers me.

- **113 : Outside Scope-Safety**

  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.

- **114 : Outside Scope-Safety**

  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.

- **115 : Outside Scope-Safety**

  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.

- **116 : Site Layout and Design**

  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.

- **117 : Outside Scope-Safety**

  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".

- **118 : Health-Radiological**

  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.Â 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.

- **119 : Health-Radiological**

  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.

- **120 : Opposition-Nuclear Power**

  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.

- **121 : Alternatives-Energy**

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

- **122 : Meteorology and Air Quality**

  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.

- **123 : Meteorology and Air Quality**

  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.

- **124 : Accidents-Severe**

  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.

- **125 : Outside Scope-Emergency Preparedness**

  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.

- **126 : Outside Scope-Security and terrorism**

  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.

- **127 : Uranium Fuel Cycle**

  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.

- **128 : Uranium Fuel Cycle**

  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?

- **129 : Hydrology-Surface Water**

  [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. </p>

- **130 : Health-Radiological**

  [W]e're upstream of the water -- of your water, and we're downwind of any kind of problems.Â 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.

- **131 : Opposition-Licensing Action**

  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.

- **132 : Socioeconomics**

  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.Â 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.

- **133 : Outside Scope-Safety**

  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.Â 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.

- **134 : Support-Licensing Action**

  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.

- **135 : Alternatives-Energy**

  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.

- **136 : Hydrology-Surface Water**

  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.

- **137 : Hydrology-Surface Water**

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.

- **138 : Opposition-Licensing Action**

  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.

- **139 : Site Layout and Design**

  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.Â 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.Â 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.Â 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.Â It's very similar in operation and design to the BWR-6. We have many, many, many years of experience operating those plants.

- **140 : Outside Scope-Safety**

  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.Â 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.Â 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.

- **141 : Need for Power**

  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.

- **142 : Alternatives-Energy**

  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.

- **143 : Uranium Fuel Cycle**

  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.Â 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.Â 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.

- **144 : Hydrology-Surface Water**

  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.Â 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.

- **145 : Process-ESP-COL**

  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.

- **146 : Outside Scope-Safety**

  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.

- **147 : Socioeconomics**

  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.

- **148 : Meteorology and Air Quality**

  We are not against renewables, solar, wind, conservation, efficiency. We teach our people to look carefully at decisions, ...Â 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.

- **149 : Site Layout and Design**

  [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.

- **150 : Site Layout and Design**

  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.

- **151 : Socioeconomics**

  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.

- **152 : Socioeconomics**

  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.

- **153 : Socioeconomics**

  <p>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.Â 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.

- **STP-COL3&4-SC-00008 (Meeting Transcript) [ML080950504]**
  - **1 : Support-Nuclear Power**

    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.

  - **2 : Ecology-Terrestrial**

    [T]he lake thatÂ [STP has] -- the 7,000 acre -- also creates some of the best bird habitats in the state of Texas.

  - **3 : Support-Nuclear Power**

    <P align=justify>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. </P> <P align=justify>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. </P>

- **4 : Socioeconomics**

  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.

- **5 : Support-Nuclear Power**

  Nuclear provides reliable, low cost power in great quantities, clean energy with zero gas emissions -- greenhouse emissions.

- **6 : Meteorology and Air Quality**

  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.

- **7 : Support-Nuclear Power**

  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.

- **8 : Outside Scope-Security and terrorism**

  <p align="justify">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.

- **9 : Outside Scope-Security and terrorism**

  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.

- **10 : Outside Scope-Security and terrorism**

  [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.

- **11 : Outside Scope-Security and terrorism**

  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.

- **12 : Outside Scope-Emergency Preparedness**

  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.

- **13 : Support-Licensing Action**

  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.

- **14 : Socioeconomics**

  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.

- **15 : Support-Licensing Action**

  [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.

- **16 : Support-Plant**

  <P align=justify>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. </P> <P align=justify>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. </P>

- **17 : Support-Licensing Process**

  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.

- **18 : Socioeconomics**

  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.

- **19 : Need for Power**

  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.Â 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.

- **20 : Support-Plant**

  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.

- **21 : Outside Scope-Emergency Preparedness**

  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.

- **22 : Outside Scope-NRC Oversight**

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.

- **23 : Ecology-Terrestrial**

  [R]ecently I had the opportunity to go and sit on a pier and watch my brother fish and a friend of his.Â ... So we sat for a time.Â 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.Â 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.

- **24 : Support-Licensing Action**

  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.Â Economically it would benefit our community, county, and surrounding counties.Â In the long rage our children would benefitdramatically.Â And so I wholeheartedly support it....

- **25 : Need for Power**

  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.Â ...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.

- **26 : Outside Scope-Miscellaneous**

  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.

- **27 : Need for Power**

  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.

- **28 : Benefit-Cost Balance**

  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.Â 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 â€“ socio-economic impacts on the residents and the businesses in San Antonio.

- **29 : Alternatives-Energy**

  [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.

- **30 : Alternatives-Energy**

  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.Â 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. </p>

- **31 : Alternatives-Energy**

  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.

- **32 : Ecology-Aquatic**

  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.

- **33 : Ecology-Terrestrial**

  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.

- **34 : Ecology-Terrestrial**

  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.

- **35 : Support-Licensing Action**

  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.

- **36 : Outside Scope-Security and terrorism**

  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.

- **37 : Support-Plant**

  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.

- **38 : Socioeconomics**

  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.Â ...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.

- **39 : Socioeconomics**

  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.

- **40 : Outside Scope-Safety**

  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.

- **41 : Support-Licensing Action**

  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.

- **42 : Support-Plant**

  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.

- **43 : Uranium Fuel Cycle**

  <P align=justify>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. </P> <P align=justify>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. </P>

- **44 : Uranium Fuel Cycle**

  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 falling apart. And, in fact, there is no confidence.

- **45 : Outside Scope-Security and terrorism**

  <P align=justify>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. </P> <P align=justify>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. </P>

- **46 : Outside Scope-Security and terrorism**

  <P align=justify>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. </P>
  <P align=justify>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. </P>

- **47 : Socioeconomics**

  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.

- **48 : Support-Licensing Action**

So I'd like to challenge you to join me in embracing this opportunity.

- **49 : Support-Licensing Action**

  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.

- **50 : Alternatives-Energy**

  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.

- **51 : Outside Scope-Safety**

  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.

- **52 : Process-NEPA**

  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.

- **53 : Process-ESP-COL**

  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?Â 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.

- **54 : Outside Scope-Safety**

  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.

- **55 : Process-ESP-COL**

  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.Â 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 NRGÂ 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.

- **56 : Process-ESP-COL**

  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.

- **57 : Process-ESP-COL**

  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.Â So the documents containing the quantities of radioactive material that would be released during normal operations are not yet available to the public.

- **58 : Health-Radiological**

  [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.

- **59 : Health-Radiological**

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.

- **60 : Health-Radiological**

  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.

- **61 : Health-Radiological**

  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.

- **62 : Health-Radiological**

  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?

- **63 : Health-Radiological**

  [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.

- **64 : Health-Radiological**

  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.

- **65 : Health-Radiological**

  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.

- **66 : Outside Scope-Safety**

  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.

- **67 : Outside Scope-Safety**

  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?Â This works very strongly in things like low-pressure turbines coming apart.Â They just rebuilt the low-pressure turbines.Â Why?Â They obviously weren't really happy with its

performance at that point, and that was done as a preventive measure.

- **68 : Outside Scope-Safety**

  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.

- **69 : Geology**

  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.Â 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?

- **70 : Outside Scope-Safety**

  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.

- **71 : Outside Scope-Security and terrorism**

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.Â 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.

- **72 : Outside Scope-Security and terrorism**

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.Â 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.Â 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.

- **73 : Alternatives-System Design**

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.

- **74 : Outside Scope-Security and terrorism**

  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.

- **75 : Outside Scope-Security and terrorism**

  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.

- **76 : Alternatives-System Design**

  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.Â

- **77 : Outside Scope-Miscellaneous**

  <P align=justify>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.</P>

- **78 : Ecology-Aquatic**

<P align=justify>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. <P align=justify>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. </P>

- **79 : Hydrology-Surface Water**

  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.

- **80 : Health-Radiological**

  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.

- **81 : Process-ESP-COL**

  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.

- **82 : Process-ESP-COL**

  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.

- **83 : Outside Scope-Security and terrorism**

  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.Â ...Physical confrontation at the site is neither required nor desirable to achieve the objections of terror; you don't have to do it.

- **84 : Outside Scope-Security and terrorism**

  <P align=justify>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. </P> <P align=justify>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. </P>

- **85 : Benefit-Cost Balance**

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.

- **86 : Benefit-Cost Balance**

  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?

- **87 : Outside Scope-Safety**

  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.

- **88 : Support-Licensing Action**

  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.

- **89 : Support-Plant**

  28 years ago ...I was the mayor of Bay City then. The city council passed a resolution supporting the plant: its construction, its operation.Â 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.Â ...

I urge the NRC to speedy licensing and approve this plant.

- **90 : Health-Radiological**

  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.

- **91 : Health-Radiological**

  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.Â 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.

- **92 : Socioeconomics**

  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.

- **93 : Support-Licensing Action**

  We welcome 3 and 4. They're good for the county.

- **94 : Socioeconomics**

  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.

- **95 : Support-Nuclear Power**

  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.

- **96 : Socioeconomics**

  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.Â 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.

- **97 : Socioeconomics**

  The temporary construction workers that are going to be here will be over a six-year period. ...Â 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.

- **98 : Socioeconomics**

  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.

- **99 : Socioeconomics**

  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.

- **100 : Socioeconomics**

  [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.

- **101 : Outside Scope-Emergency Preparedness**

  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.

- **102 : Support-Licensing Action**

  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.

- **103 : Uranium Fuel Cycle**

  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.

- **104 : Alternatives-Energy**

  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.

- **105 : Alternatives-Energy**

  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.

- **106 : Opposition-Plant**

  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.

- **107 : Outside Scope-Safety**

  <p align="left">I'm really worried about the large amount of money involved in the push for more nuclear power plants.Â 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.Â 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.</p>

- **108 : Outside Scope-Safety**

  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.

- **109 : Outside Scope-Security and terrorism**

  [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.Â 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.

- **110 : Outside Scope-Safety**

  <P align=justify>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. </P> <P align=justify>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.</P>

- **111 : Uranium Fuel Cycle**

  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.Â ... but it's not something we should delay going forward with new construction and wait 20 or 25 years till the technology is developed.Â We should do it in parallel.

- **112 : Support-Licensing Action**

  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.

- **113 : Socioeconomics**

  <P align=justify>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. </P> <P align=justify>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.</P>

- **114 : Uranium Fuel Cycle**

  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.

- **115 : Outside Scope-Security and terrorism**

  <P align=justify>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. </P> <P align=justify>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. </P> <P align=justify>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.</P>

- **116 : Outside Scope-Security and terrorism**

  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.

- **117 : Health-Radiological**

  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.

- **118 : Outside Scope-Safety**

  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.

- **119 : Outside Scope-Safety**

  [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.

- **120 : Outside Scope-Safety**

  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.

- **121 : Land Use-Transmission lines**

  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.

- **122 : Alternatives-System Design**

  [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.Â These are small towers, more akin to what you see out behind a large commercial building that provided for air conditioning.

- **123 : Accidents-Severe**

  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.

- **124 : Outside Scope-Safety**

  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.

- **125 : Socioeconomics**

  Units 1 and 2 provide clean, reliable power to millions of Texans. ...Â We also provide millions of dollars of benefits to Matagorda County.

- **126 : Meteorology and Air Quality**

  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.

- **127 : Alternatives-Energy**

  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.

- **128 : Site Layout and Design**

  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.Â 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.

- **129 : Socioeconomics**

  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.

- **STP-COL3&4-SC-00009 (Letter) [ML080460530]**
  - **1 : Opposition-Licensing Action**

    I am writing to oppose any addition to the South Texas Nuclear plant in Bay City, Texas.

  - **2 : Benefit-Cost Balance**

    Nuclear power is not competitive with other forms of power generation and requires taxpayer dollars to subsidize.

  - **3 : Need for Power**

    It has not been shown that there is a need for this expansion.

  - **4 : Uranium Fuel Cycle**

    How can the generation of waste which we still do not know how to safely store be justified?

- **5 : Outside Scope-Safety**

  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.

- **6 : Outside Scope-Safety**

  Much shoddy workmanship was exposed in the original construction of the South Texas Nuclear Plant.

- **7 : Alternatives-Energy**

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

- **STP-COL3&4-SC-00010 (Letter) [ML080640543]**
  - **1 : Socioeconomics**

    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?

  - **2 : Socioeconomics**

    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?

- **3 : Health-Radiological**

  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 ofÂ low-level radiation exposure to surrounding populations?

- **4 : Hydrology-Surface Water**

  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.Â If the plant uses its full allotment (of water), will there be adequate water for the new reservoir?

- **5 : Hydrology-Surface Water**

  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?

- **6 : Hydrology-Surface Water**

  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?

- **7 : Hydrology-Surface Water**

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?

- **8 : Hydrology-Groundwater**

  If global warming is occurring and as severe as we anticipate: Will groundwater decline?

- **9 : Hydrology-Surface Water**

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

- **10 : Hydrology-Surface Water**

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

- **11 : Hydrology-Surface Water**

  If global warming increases sea level rise by 7 meters - will STNP be within the storm surge zone?

- **12 : Outside Scope-Emergency Preparedness**

  There is no threat assessment for Category 4 or 5 hurricanes.

- **13 : Outside Scope-Emergency Preparedness**

  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?

- **14 : Outside Scope-Emergency Preparedness**

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.Â 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?

- **15 : Outside Scope-Emergency Preparedness**

  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.

- **16 : Accidents-Design Basis**

  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.

- **17 : Ecology-Terrestrial**

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?

- **18 : Health-Radiological**

   <o:p>What is the effect of low-level radiation over prolonged periods on wildlife in the area?Â </o:p>

- **19 : Uranium Fuel Cycle**

  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.

- **20 : Need for Power**

  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;

- **21 : Need for Power**

  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.

- **22 : Need for Power**

  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.

- **23 : Uranium Fuel Cycle**

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.

- **STP-COL3&4-SC-00011 (Letter) [ML080640196]**
  - **1 : Alternatives-Energy**

    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.

- **STP-COL3&4-SC-00012 (Letter) [ML080640197]**
  - **1 : Opposition-Licensing Action**

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

  - **2 : Opposition-Nuclear Power**

    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.

  - **3 : Benefit-Cost Balance**

Nuclear power still requires Federal subsidies to make it competitive with other forms of power generation.

- **4 : Opposition-Nuclear Power**

  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.

- **5 : Uranium Fuel Cycle**

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

- **6 : Alternatives-Energy**

  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.

- **7 : Opposition-Nuclear Power**

  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.

- **STP-COL3&4-SC-00013 (Letter) [ML]**
  - **1 : Support-Plant**

    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.

- **2 : Socioeconomics**

  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.

- **3 : Support-Licensing Action**

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

- **4 : Support-Licensing Action**

  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.

- **5 : Support-Licensing Action**

  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.

- **STP-COL3&4-SC-00014 (Letter) [ML]**

- **1 : Outside Scope-Miscellaneous**

  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.

- **2 : Need for Power**

  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 ls required for economic growth in South Texas. The proposed action and alternatives must be able to meet these requirements.

- **3 : Benefit-Cost Balance**

  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.

- **4 : Alternatives-Energy**

  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.

- **STP-COL3&4-SC-00015 (Letter) [ML]**

- **1 : Opposition-Licensing Action**

  The Coastal Bend Sierra Club joins the state-level Lone Star Sierra Club in opposing the expansion of STP.

- **2 : Uranium Fuel Cycle**

  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).

- **3 : Opposition-Nuclear Power**

  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.

- **4 : Benefit-Cost Balance**

  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).

- **5 : Outside Scope-Security and terrorism**

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.

- **6 : Hydrology-Surface Water**

  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.

- **7 : Accidents-Severe**

  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.

- **8 : Alternatives-Energy**

  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."

- **9 : Alternatives-Energy**

  [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.

- **10 : Opposition-Nuclear Power**

  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).

- **11 : Benefit-Cost Balance**

  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).

- **STP-COL3&4-SC-00016 (Letter) [ML]**
  - **1 : Support-Plant**

    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.

  - **2 : Outside Scope-Emergency Preparedness**

    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.

  - **3 : Support-Plant**

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

- **STP-COL3&4-SC-00017 (Letter) [ML]**
  - **1 : Hydrology-Surface Water**

    ...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.

- **2 : Hydrology-Groundwater**

  ...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.

- **3 : Uranium Fuel Cycle**

  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.

- **4 : Health-Radiological**

  ... 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 aÂ 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,Â in the case of granting nuclear power plant expansion, the risk is too high.

- **5 : Opposition-Licensing Action**

  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.

- **STP-COL3&4-SC-00018 (Email) [ML]**
  - **1 : Outside Scope-Miscellaneous**

    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 Antonioâ€™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.

- **2 : Process-NEPA**

  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.

- **3 : Alternatives-Energy**

  CPSâ€™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 â€œso committed to this goal that energy efficiency is treated as a new resource for electrical generation.â€ 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.

- **4 : Alternatives-Energy**

  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 CPSâ€™s 1,350 mW share of STP 3 &4â€™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 familyâ€™s energy bills and creating â€œgreen collarâ€□ jobs in San Antonio.

- **5 : Alternatives-Energy**

  The EIS needs to include a thorough analysis of alternatives specific to meeting San Antonioâ€™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.

- **6 : Outside Scope-Miscellaneous**

  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.

- **STP-COL3&4-SC-00019 (Letter) [ML080840434]**
  - **1 : Support-Plant**

<SPAN style="FONT-FAMILY: 'sans-serif'," color:#000000? font-weight:normal; sans-serif; ?helvetica?, font-size:9.6pt;><FONT size=2>STP has safely generated/operated nuclear reactors for 20+ years without incident. There has been no adverse environmental impact during this time.</FONT></SPAN>

- **2 : Support-Licensing Action**

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

- **3 : Support-Plant**

  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.

- **STP-COL3&4-SC-00020 (Letter) [ML080840435]**
  - **1 : Process-NEPA**

    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.]