UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION I
475 ALLENDALE ROAD
KING OF PRUSSIA, PENNSYLVANIA 19406-1415

November 9, 2007

The Alliance for a Clean Environment
P. O. Box 3063
Stowe, PA 19464

SUBJECT: RESPONSE TO YOUR LETTER REGARDING THE PLANNED DRY CASK STORAGE SYSTEM AT THE LIMERICK GENERATING STATION AND OTHER AREAS OF INTEREST

Dear Ms. Cuthbert:

I am writing in response to your letter of May 2, 2007, in which you posed a number of questions, including the planned dry cask storage system proposed for the Limerick Generating Station (Limerick). This letter responds to your letter in a topical, question-by-question format.

Question 1: NRC written statements to ACE are contradicted by oral statements made by NRC employees at meetings about the serious issue of how long spent fuel at Limerick must stay in the fuel pool before removal to dry cask storage.

Title 10 of the Code of Federal Regulations, Part 72 (10 CFR 72), establishes the requirements for licensing of Independent Storage Facilities for spent reactor fuel and high level nuclear waste. §72.2 "Scope," in subsection (a)(1) states, in part, that licenses issued under this part are limited to "*power reactor spent fuel aged for at least one year*" (emphasis added). When NRC personnel speak in general terms about dry cask storage, such as at public meetings, this is the time frame usually discussed.

Different dry cask designs have different requirements for aging of spent reactor fuel. These requirements are based on heat dissipation of the specific cask design, as well as the radiation shielding capability of the specific cask design. The requirements are based on the enrichment of the fuel in percent Uranium 235 (%U235) and fuel burnup measured in gigawatt days per metric ton of uranium (GWd/MTU).

Limerick plans on using the NUHOMS-61BT dry cask system from Transnuclear, Inc.
10 CFR 72.214, which lists the approved storage systems, shows this system under Certificate of Compliance (CoC) No. 1004. The current version of this CoC is Amendment 9, issued April 17, 2007. The CoC is available in ADAMS under Accession Number ML071070582. The associated NRC Safety Evaluation Report is available under Accession Number ML071070584. The Amendment 9 Technical Specifications are available under Accession Number ML062830067.

Table 1-2q of the Technical Specifications (Amendment 9) gives the minimum required years of cooling time after removal from the reactor core based on enrichment and burnup. As you can see from the information in Table 1-2q, the minimum cooling time to store fuel based on its burnup and enrichment is four years. As the table indicates depending on these parameters the required minimum cooling time may be longer.

Question 2: How does NRC justify allowing Exelon to avoid providing back-up power in a black out for warning sirens in this heavily populated area around Limerick Nuclear Power Plant?

The NRC requirements for emergency planning are contained in 10 CFR 50.47, and in Appendix E to 10 CFR 50. These describe the minimum standards to qualify for a license to operate a production or utilization facility. The Federal Emergency Management Agency and The Commonwealth of Pennsylvania have issued additional guidance on emergency planning. §50.47(b)(6) requires, in part, that provisions exist for prompt communications to the public. The requirement for audible warning systems came out of the "NRC Action Plans Developed as a Result of the TMI-2 Accident," NUREG-0660. They were incorporated into "Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants," which was jointly issued by NRC as NUREG-0654 and FEMA as FEMA-REP-1 (ML040420012).

The requirements include the capability for fixed, mobile and/or electronic tone generators to provide an alerting signal with sufficient timeliness and intensity to permit notification by broadcast media in a timely manner (within 15 minutes within the 10 mile EPZ). NRC licensees are required to demonstrate that this capability exists, however, the responsibility for activating the system remains with governmental agencies. Since the siren systems provide an offsite emergency preparedness function, the NRC relies on FEMA to establish design criteria and to review these systems against those criteria.

Most sites opted to utilize siren systems for the alerting function, since that was the most widely available system when the requirement was adopted in 1980. Since that time, other methods have become available, such as NOAA Tone Alert radios, rapid-dialing telephone systems (so-called Reverse 911 systems) and Connect-CTY, an Internet-based system for sending phone messages and e-mail. Which system to use is left to the judgement of local municipal authorities. The requirements do not include back-up power for sirens, if used, but do include notification within 45 minutes of the population who may not have received the initial notification. This is usually accomplished by "route alerting" using police and fire department resources.

Limerick utilizes a siren system for the alerting function and “route alerting” for notification of the public who may not have received initial notifications (including sirens which have lost power). These warning systems meet NRC requirements.

Currently, Federal regulations and guidance do not require any private organization or governmental agency to have an emergency backup power supply to their sirens. Only the Indian Point Energy Center, in Buchanan, New York, has a requirement for backup power for the alert and notification system. That requirement was written into the Energy Policy Act of 2005 by New York's congressional delegation, in part, due to the August 2003 blackout that impacted the Indian Point area, but did not effect the Limerick area.

Question 3A: Corrosion of steel holding high-level radioactive wastes above ground in casks

The NUHOMS-61BT canisters are constructed with an outer shell of over one half inch thick stainless steel for physical integrity as well as corrosion resistance. During the loading sequence, the canisters are dewatered, dried, and filled with helium. This provides an inert, non-corrosive atmosphere for the fuel assemblies, structural elements, and the fuel support basket inside the cask. The minimum service life specified for the casks is 50 years, although the casks are expected to last hundreds of years.

References to service life and design conditions can be found in the NUHOMS Final Safety Analysis Report, Revision 8 (non-proprietary) in:

- Volume 1 (ML042110421), Table 3.2-1, "Summary of NUHOMS Component Design Loadings;
- Volume 2 (ML051040569), Section K.4.4.1, "NUHOMS-61BT DSC Thermal Models";
- Volume 3 (ML051040570), Section M.9.1.7.1.7; and
- Volume 4 (ML051040571).

While it is true that stainless steels (sometimes referred to as *corrosion resistant* steels) are not impervious to corrosion, high oxidation resistance in air at ambient temperature is easily achieved with additions of chromium. The stainless steel used for the NUHOMS dry shielded canisters contains chromium. The chromium forms a layer of chromium oxide (Cr_2O_3) when exposed to oxygen. The layer is too thin to be visible, meaning the metal remains lustrous. It is, however, impervious to water and air, protecting the metal beneath. Also, this layer quickly reforms when the surface is scratched. This phenomenon is called passivation and is seen in other metals, such as aluminum and titanium. Examples of the resistance of stainless steel to atmospheric phenomena are the ornamental top of the Chrysler Building in New York City (completed in 1930) and the Gateway Arch in St. Louis (completed in 1965), which do not show signs of deterioration, and retain their luster and structural integrity to this day.

The dry shielded canisters are inserted into horizontal storage modules fabricated of reinforced concrete for long-term storage on-site. A thickness of about three feet of concrete is used to provide radiation shielding. Air inlet and outlet vents are built into the concrete module to allow cooling by passive circulation. As a result, the dry shielded canisters are not directly exposed to the elements, nor will they be subjected to impingement by rain, snow, or other forms of precipitation. Wire mesh screens over the air vents prevent intrusion of debris and wildlife.

Regarding Yucca Mountain, NRC regulations and actions governing ISFSIs are not impacted or dependent on the opening of a permanent repository. Many power plants will require dry cask storage to support continued power plant operations, irrespective of the Yucca Mountain schedule. NRC's position on the interim spent fuel storage assume a permanent repository will open in the first quarter of the 21st century. This is outlined in the Waste Confidence Decision (ML013090239).

Question 3B: ACE has requested continuous air monitoring for corrosives, especially all corrosive chemicals on the list of corrosive chemicals from Limerick's MSDS sheets, for chemicals added to Limerick's cooling tower waters.

NRC has previously evaluated issues related to cooling tower chemical treatments. Those evaluations were summarized in Mr. O'Connell's letter to you of October 17, 2006.

If there were to be any deterioration of the concrete horizontal storage module due to water

treatment chemical releases, it would become readily apparent during the daily temperature monitoring or air inlet and outlet inspections required by the technical specifications.

Question 4: Why would NRC allow Exelon to place casks holding high-level radioactive wastes under high-tension wires?

If properly evaluated and found to be safe, the NRC has allowed ISFSIs to be located under high-tension wires. The presence of overhead electrical transmission lines is not evaluated in the Standardized NUHOMS Safety evaluation report. The staff expects that unique issues at a site that fall outside the analysis associated with the Certificate of Compliance will be considered by Limerick in accordance with requirements contained in 10 CFR 72.212, "Conditions of general license issued under §72.210." The evaluations performed by the general licensee in accordance with 10 CFR 72.212 are subject to NRC inspection. There are plants that have located ISFSIs under high tension wires (e.g. Hatch). In the case of Hatch a 10CFR 72.212 evaluation documented the analysis of a high tension wire transmission tower falling and its potential mechanical impact on the ISFSI. The evaluation determined that the ISFSI would not be adversely affected by the transmission tower falling. A similar analysis was performed for the specific license associated with the Diablo Canyon ISFSI. Diablo Canyon's ISFSI is also located under a high tension line. In the case of Diablo Canyon, the staff evaluated a transmission tower collapse and found Pacific Gas and Electric's analysis of the event to be acceptable. The staff's determination is documented in Section 15.1.2.17, "Transmission Tower Collapse," of the safety evaluation report (Available in ADAMS under accession number ML040780986).

In addition, the Standardized NUHOMS design is evaluated for lightning strikes in Section 8.2.6 of the Safety Analysis Report. The evaluation states:

> "Should lightning strike in the vicinity of the HSM the normal storage operations of the HSM will not be affected. The current discharged by the lightning will follow the low impedence path offered by the surrounding structures. Therefore, the HSM will not be damaged by the heat or mechanical forces generated by current passing through the higher impedence concrete. Since the HSM requires no equipment for its continued operation, the resulting current surge from the lightning bolt will not affect the normal operation of the HSM."

The staff believes that electrical surges from downed power lines are bounded by the lightning analysis and an electrical surge from a downed power line will not impact the safe operation of the ISFSI.

The NUHOMS horizontal storage modules do not involve overhead lifting for cask insertion or removal so overhead clearance is not an issue. Considerations for siting of the horizontal storage modules do include security perimeter placement, spacing between rows of modules, and access for the cask transporter (including road grade).

Question 5: What happens to all the radioactive gasses that are continually generated in high level radioactive wastes due to the radioactive decay of the toxic mixture of radioactive isotopes present there?

There is a small amount of gas that continues to be generated in the fuel as a result of radioactive decay and other mechanisms such as from a small amount of fissioning that continues to take place in spent nuclear fuel. The amount of gas that is generated in spent nuclear fuel, however, is small in comparison to the amount of fission product gas that is generated inside the fuel rod cladding in an operating reactor. The fuel cladding is designed to accommodate the increase in pressure from fission product gasses during power operations. During storage of spent nuclear fuel the amount of new gas being generated inside the fuel rod cladding is negligible when compared to the amount of gas that is

created during power operations. The fuel rod cladding is designed to accommodate a gas pressure significantly higher than would occur due to the gas pressure created during storage of the spent nuclear fuel.

For spent fuel the cladding serves as one of the barriers to preventing release of fission product radioactive gasses to the environment. A second important barrier is the confinement boundary provided by the dry cask storage design. In the case of the NUHOMS-61BT design the confinement boundary is provided by the dry shielded canister. The safety analysis report for the NUHOMS-61BT discusses the evaluation of this confinement barrier including assuming a certain amount of the fuel rod cladding failing. The analysis concludes that the maximum internal pressures in the NUHOMS-61BT dry shielded canister during transfer and storage are below design pressure for the dry shielded canister and this confinement barrier remains intact.

Question 6: ACE raised concerns about Limerick Airport being too close to the nuclear power plant for several years and repeatedly suggested this airport should have been closed immediately after 9/11.

Limerick Generating Station has been designed to resist the impact of the size of aircraft which can be accommodated by the Limerick Airport. As such, the number of aircraft at the airport does not affect the safety of the plant. As part of the sale of Limerick Airport, Exelon is placing a "Restrictive Covenant" (similar to a deed restriction) on the sale which would prohibit expansion of the runways to accept larger aircraft without prior revision to the Limerick Generating Station license. The Federal Aviation Administration and the Pennsylvania Department of Transportation have the authority to regulate airfields in Pennsylvania, including their sale.

With regard to the question of whether missiles can be shot from helicopters and Limerick security, shortly after September 11, 2001, the NRC undertook a comprehensive re-evaluation of the agency's safeguards and security program, regulations, and procedures that have resulted in numerous security improvements. As part of this review, NRC has revised the adversary attributes in the design basis threats (DBTs) for radiological sabotage and for theft or diversion of nuclear material. The ability to fire air-to-ground missiles has been a feature of every U. S. military helicopter since the introduction of the 'D' variant of the UH-1 Iroquois (a.k.a. "Huey") helicopter in 1963. However, installation of this capability on private aircraft is regulated by the Department of Justice, Bureau of Alcohol, Tobacco, Firearms and Explosives.

The DBT describes the adversary force composition and characteristics against which plant owners must design their physical protection systems and response strategies to defend. The DBT applies to nuclear power plants and certain nuclear fuel fabrication facilities. The NRC has discussed security requirements with representatives of the nuclear industry cleared to receive such information, and authorized Federal and State agencies. The particular attributes of the DBT remain classified and are not releasable to the public.

Question 7: Why would NRC permit Wackenhut (in a clear conflict of interest) to be in charge of testing itself and its competitors in simulated "force-on-force" terrorist attacks?

The NRC does not regulate Wackenhut, or any other licensee's contract security guard force. The licensee is ultimately held responsible for meeting NRC standards for the protection of its facilities. Utilities have the option of hiring contractors to perform these duties, but the licensee is ultimately held responsible for meeting the requirements of its approved security plan, as specified in a license condition. Licensees are held responsible for any failure on the part of their contractors. When NRC regulatory standards are not met, NRC takes appropriate steps to ensure that the licensee promptly corrects the problems.

A credible, well-trained and consistent mock adversary force is vital to the NRC's Force-on-Force (FOF) Exercise Program. Prior to September 11, 2001, power plant operators had assembled adversary teams that frequently included security officers from their own sites, other licensees, and state police tactical team members. However, using these diverse resources caused inconsistencies in the capabilities of the adversary team.

To improve the program, the NRC worked with the nuclear industry to develop a composite adversary force (CAF) that is trained to standards issued by the Commission. NRC initially considered using NRC staff, other federal personnel, and industry personnel for ensuring a credible, well-trained adversary force, but decided to issue adversary force standards and guidelines for the industry to implement. The new adversary force has been used in all FOF exercises conducted after October 2004. The CAF is a significant improvement in ability, consistency, and effectiveness over the previous adversary forces.

The CAF is evaluated during each exercise using rigorous NRC performance standards issued in April 2004. The standards cover:

- knowledge, skills, abilities, performance and training of team members;
- individual team tactics, tactical communications, and operational planning;
- firearms knowledge and proficiency;
- exercise simulation equipment, physical security equipment and specialized equipment; and
- medical qualifications, physical fitness, specific minimum qualifications, and medical disqualification.

The CAF is managed by a company (Wackenhut) that provides security for many U.S. nuclear power plants and is, therefore, well-versed in the security operations of power plants. The NRC recognizes that there may be a perception of a conflict of interest where the management company cannot adequately test either the CAF or the plant security force. The NRC requires a clear separation of functions between the CAF and plant security force to ensure a reliable mock adversary force. In addition, no member of the CAF may participate in an exercise at his or her home site.

It is important to emphasize that the NRC, not the mock adversary force, designs, runs, and evaluates the results of the FOF exercises. Because the mock adversary force does not establish the exercise objectives, boundaries, or timelines, and because the adversary force's performance is subject to continual observation by NRC and its contractors, the agency controls the exercise. Should industry be unable to maintain an adequate and objective adversary force that meets the standards mandated by NRC, the NRC will take the necessary actions to ensure the effectiveness of the force-on-force evaluation program.

After September 2001, NRC required numerous security enhancements. The only way to meet these requirements was through extensive use of overtime for security force members. This situation has eased as more security guards have been hired and trained industry-wide. NRC recognized that excessive overtime posed a challenge to the security force personnel, and issued an order limiting guard overtime in 2003. At the same time, NRC commenced work on rulemaking which would revise the fitness for duty program requirements in 10 CFR 26 to include fatigue issues.

NRC reviews security force overtime as part of its routine inspection program. NRC inspectors verify compliance with the 2003 order on security force overtime. With the new revised fitness for duty rule, which includes worker fatigue, the issue of attentiveness of all nuclear power plant workers, not just security guards, has been addressed.

Question 8: Why does the NRC believe Limerick Nuclear Power Plant does not need to be protected against terrorist missiles and air strikes?

Protecting Against Aircraft
Since September 11, 2001, the issue of an airborne attack on this nation's infrastructure, including both operating and potential new nuclear power plants, has been widely discussed. The NRC has comprehensively studied the effect of an airborne attack on nuclear power plants. Shortly after 9/11, the NRC began a security and engineering review of operating nuclear power plants. Assisting the NRC were national experts from Department of Energy laboratories, who used state-of-the-art experiments and structural and fire analyses.

These classified studies confirm that there is a low likelihood that an airplane attack on a nuclear power plant would affect public health and safety, thanks in part to the inherent robustness of the structures. A second study identified new methods plants could use to minimize damage and risk to the public in the event of any kind of large fire or explosion. Nuclear power plants subsequently implemented many of these methods.

The NRC is now considering new regulations for future reactor's security. The goal is to include inherent safety and security features to minimize potential damage from an airborne attack.

Integrated Federal Response
It is the federal government and military's responsibility to protect the nation against an aircraft attack. To that end, the NRC works closely with its federal partners to identify and implement enhanced security programs, including:

- military and Department of Homeland Security program to identify and protect critical infrastructure;
- criminal history checks on flight crews;
- reinforced cockpit doors;
- checking of passenger lists against "no-fly" lists;
- increased control of cargo;
- random inspections;
- increased Federal Air Marshall presence;
- improved screening of passengers and baggage;
- controls on foreign passenger carriers; and
- improved coordination and communication between civilian and military authorities.

In addition, actions taken by federal aviation safety and security agencies (improved ability to detect deviation from planned flight paths and greater military aircraft intercept capability) have reduced the likelihood that large commercial aircraft could be used to attack critical infrastructure, including a nuclear facility. Other actions, such as improved communication between military surveillance authorities, NRC, and its licensees, would allow plant operators to prepare the plant for safe shutdown should it be necessary. These actions, coupled with those taken by NRC and the nuclear industry, are an integral part of the government's overall strategy for protecting the nation's critical infrastructure.

Question 9: Why does the NRC continue to claim Limerick's high-level radioactive wastes will be transported to Yucca Mountain in 20 years and continue to only require standards to license the waste to be stored above ground at Limerick for 20 years?

The Nuclear Waste Policy Act of 1982, and the Nuclear Waste Policy Amendments Act of 1987, specify a detailed approach for the disposal of high-level nuclear waste. Under these acts:

- The Department of Energy has the responsibility to construct and operate a geologic repository;
- The Nuclear Regulatory Commission has the responsibility to regulate geologic disposal of the

waste;
- The Environmental Protection Agency has responsibility for developing standards to protect the environment from offsite releases of radioactive materials from the repository; and
- Ultimate disposal of the waste is to be in solid form in a licensed, deep, geologic structure.

On-site storage of spent fuel in dry casks is a temporary measure. In conformance to the regulations in 10 CFR 72, Certificates of Compliance for dry cask storage designs are for a term of 20 years, and are renewable. Renewal of the Certificate of Compliance will require evaluation of environmental effects, and technical information such as any potential degradation of the canisters or horizontal storage modules. NRC's positions on interim spent fuel storage assume a permanent repository will open in the first quarter of the 21st century. This is outlined in the Waste Confidence Decision (ML013090239).

Question 10: NRC radiation protection standards are not conservative nor protective.

In 2005, the National Academy of Sciences released its seventh report in a series on the Biological Effects of Ionizing Radiation, the so-called BEIR VII Report. The report was sponsored by the U.S. Departments of Defense, Energy and Homeland Security, the U.S. Nuclear Regulatory Commission, and the U.S. Environmental Protection Agency. The committee of 17 physicians and scientists was formed in 1998 to conduct an assessment of the health risks to humans from exposure to low levels of ionizing radiation.

The committee reviewed and evaluated the scientific literature for biological and biophysics data regarding health effects of low-level ionizing radiation, including models at the molecular, cellular and animal levels in humans. The committee determined that the preponderance of the scientific evidence shows that low doses of ionizing radiation, such as X-rays and gamma rays, are likely to pose some risk of health effects. The committee concluded that the risk of cancer proceeds in a linear fashion at lower doses without a threshold (linear no-threshold model). The linear no-threshold model is accepted by the NRC as a conservative model for determining radiation dose standards recognizing that the model may over estimate radiation risk.

In general the magnitude of the estimated risks for total cancer mortality or leukemia has not changed greatly from estimates provided in previous reports. New data and analyses have reduced sampling uncertainty, but uncertainties related to estimating risk for exposure at low doses and dose rates remain large. Uncertainties in estimating risks of site-specific cancers are especially large.

The current framework of radiological protection used by NRC is based on the assumption that there is a linear, no-threshold dose-response relationship between radiation exposure and potential development of adverse health effects such as cancer or leukemia. The NRC used this hypothesis as a theoretical basis to develop radiological protection standards that are adequately protective of workers, members of the public, and the environment. NRC regulations and radiation exposure limits in 10 CFR 20 are consistent with recommendations of national and international scientific organizations and with practices in other developed nations.

The BEIR VII Report is important because it documents the National Academy's conduct of an extensive review of the scientific literature, specifically concentrating on new scientific information published since 1990. This material, particularly new information concerning the Japanese atomic bomb survivors, enabled the Committee to refine earlier estimates of health risk from radiation exposure. However, none of this information leads to a major change in the overall assessment of the

relationship of exposure to ionizing radiation and human health effects.

I trust that this information is responsive to your query. I would also like to call your attention to a new publication, entitled “Security Spotlight” that we have prepared and posted to the NRC’s web page at www.nrc.gov.

If you have additional questions, please feel free to contact me at (610) 337-5120.

Sincerely,

/RA/

Paul G. Krohn, Chief
Projects Branch 4
Division of Reactor Projects

Distribution:
See next page

shows that low doses of ionizing radiation, such as X-rays and gamma rays, are likely to pose some risk of health effects. The committee concluded that the risk of cancer proceeds in a linear fashion at lower doses without a threshold (linear no-threshold model). The linear no-threshold model is accepted by the NRC as a conservative model for determining radiation dose standards recognizing that the model may over estimate radiation risk.

In general the magnitude of the estimated risks for total cancer mortality or leukemia has not changed greatly from estimates provided in previous reports. New data and analyses have reduced sampling uncertainty, but uncertainties related to estimating risk for exposure at low doses and dose rates remain large. Uncertainties in estimating risks of site-specific cancers are especially large.

The current framework of radiological protection used by NRC is based on the assumption that there is a linear, no-threshold dose-response relationship between radiation exposure and potential development of adverse health effects such as cancer or leukemia. The NRC used this hypothesis as a theoretical basis to develop radiological protection standards that are adequately protective of workers, members of the public, and the environment. NRC regulations and radiation exposure limits in
10 CFR 20 are consistent with recommendations of national and international scientific organizations and with practices in other developed nations.

The BEIR VII Report is important because it documents the National Academy's conduct of an extensive review of the scientific literature, specifically concentrating on new scientific information published since 1990. This material, particularly new information concerning the Japanese atomic bomb survivors, enabled the Committee to refine earlier estimates of health risk from radiation exposure. However, none of this information leads to a major change in the overall assessment of the relationship of exposure to ionizing radiation and human health effects.

I trust that this information is responsive to your query. I would also like to call your attention to a new publication, entitled “Security Spotlight” that we have prepared and posted to the NRC’s web page at www.nrc.gov.

If you have additional questions, please feel free to contact me at (610) 337-5120.

Sincerely,
/RA/
Paul G. Krohn, Chief
Projects Branch 4
Division of Reactor Projects

Distribution:
See next page

SUNSI Review Complete: PGK (Reviewer’s Initials)

DOCUMENT NAME:T:\DRP\BRANCH4\LIMERICK\ACEReply2Rev7.wpd

After declaring this document “An Official Agency Record” it **will** be released to the Public.

To receive a copy of this document, indicate in the box: "C" = Copy without attachment/enclosure
"E" = Copy with attachment/enclosure **"N"** = No copy

ML073170116

OFFICE	RI/DRP	N	RI/DRS		OPA		ORA		RI/DNMS	
NAME	RFuhrmeister		JTrapp/jt		DScrenci/ds		RBarkley/rb		RLorson/rl	
DATE	07/01/07		08/09 /07		08/09/07		08/09/07		08/23/07	

OFFICE	RI/DRP		NMSS/DSFST/ LID/LB		NSIR/DPR/DDRP/ RIO/SIT		NSIR/DPR/DDEP	
NAME	PKrohn/pgk		RHall/JSebrosky		Janderson/per email		Pmilligan/per telecon	
DATE	11/08/07		08/27/07		11/08/07		08/21/07	

OFFICIAL RECORD COPY

Distribution:
P. Krohn, DRP
R. Fuhrmeister, DRP
J. Trapp, DRS
D. Screnci, PAO
R. Barkley, ORA
D. Lew, DRP
J. Clifford, DRP
M. Gamberoni, DRS
D. Roberts, DRS
J. White, DRS
S. Hansell, DRP
T. Moslak, DRS
R. Nimitz, DRS
J. Noggle, DRS
M. Leach, NSIR
N. Mamish, NSIR
B. McDermott, NSIR
A. McMurtray, NSIR
C. Bickett, DRP
L. Pinkham, DRP
K. Farrar, ORA
N. McNamara, ORA
M. McLaughlin, ORA
R. Lorson, DNMS
R. Prince, DNMS
R. Laufer, RI, OEDO
R. Correia, NSIR
R. Way, NSIR