UNITED STATES
NUCLEAR REGULATORY COMMISSION
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Summary of NRC's Review of the Recent Security Issues at the South Texas Project Nuclear Power Plant

This refers to the Nuclear Regulatory Commission's (NRC) recent review of security activities at the South Texas Project nuclear power plant, which is owned and operated by the South Texas Nuclear Operating Company, a holding company owned by NRG Energy, CPS Energy and Austin Energy, and located about 90 miles southwest of Houston, near Bay City, Texas.

Beginning the week of September 18, 2006, an NRC team consisting of Region IV Physical Security Inspectors, a Reactor Inspector, and a Security Specialist, from the Office of Nuclear Security and Incident Response, conducted an inspection of the South Texas Project Security Program. As part of that effort more than seventy-five (75) South Texas Project security officers and other plant employees were interviewed. In addition, the team reviewed numerous South Texas Project security-related documents. Overall, the inspection concluded that the security program at South Texas Project Electric Generating Station adequately protects the public health and safety. However, the NRC identified a minor violation of NRC requirements associated with vehicle searches. There also were some issues identified that were outside NRC regulatory jurisdiction, which if not addressed by the licensee, could potentially impact the safety conscious work environment at South Texas Project Electric Generating Station.

The following information provides a status of NRC activities and observations to date concerning the inspection initiated the week of September 18, 2006. Given the sensitive nature of the materials and discussions conducted during the NRC's review, the information provided below is limited to ensure that sensitive security information is not revealed. While we remain fully committed to our goal of increasing public confidence by communicating with the public, the NRC must balance that goal with our commitment to ensure the continued safe and secure operation of the nuclear facilities in our country. The NRC has determined that the licensee has taken appropriate actions to address potential security-related issues that were identified and revealed during the course of our review.

- The NRC reviewed the South Texas Project vehicle search practices related to a fire control vehicle staged inside the Protected Area. Once a week, per a Preventative Maintenance Work Order (PMWO) requirement, the vehicle is to be driven outside the Protected Area for at least 15 minutes. The requirement calls for a plant operator, escorted by a security officer to drive the vehicle for the allotted time and then return it to the staging area inside the Protected Area. Upon return, the vehicle is required to be searched; however, if escorted by an armed security officer, the contents of the vehicle are not required to be searched. Through interviews with plant operators and security

personnel, the team determined that on several occasions in 2005 and the first quarter of 2006, this vehicle was operated on a public highway (off the licensee property) and allowed entry back into the Protected Area without a proper search being conducted.

Based on the review of this matter, it was determined there was conflicting guidance provided to the security staff regarding how the officers were to implement the search process. Emails sent to security officers on December 07, 2004, and March 28, 2006, from a security supervisor, addressed the fire control vehicle escort procedures, weapon restrictions of officers departing site property, and vehicle search requirements.

The practice of allowing the vehicle to enter the Protected Area without being properly searched is a violation of the licensee security plan and procedures, which will be processed in accordance with the NRC's Reactor Oversight Process. The licensee implemented immediate corrective actions and entered this issue into their Corrective Action Program as Corrective Action documents, CR #06-11871 and 06-11949.

- The NRC reviewed the licensee's coordination with law enforcement and military authorities involved in the protective strategy for South Texas Project. This coordination involves local law enforcement having responsibility for patrol duties in the Owner Controlled Area, as well as, involvement in simulated drills as appropriate. Based on the NRC review, the NRC determined that the STP Security and Contingency Plans include adequate information regarding the use of military organizations and Local Law Enforcement Agencies (LLEA).

- The NRC reviewed the communications equipment used by officers for communicating between posts. Through interviews conducted by the team, the majority of the officers questioned related that other than just being old, there were few problems with the radios carried in the past. Some officers stated the radio batteries did not always hold a charge as long as they should, but added that for the most part, the radios transmitted and receive adequately. Other officers questioned had no problems with the old radios working properly, but mentioned there weren't enough radios for each officer to be issued their own radio, requiring radio issue and turn-in each shift.

  The team learned the officers had been issued their own new radios several weeks prior to the team arriving on site. The officers felt the new radios were an improvement over the old radios; however, most of the officers questioned stated that speaker volume on the lapel microphones for the new radios was not as loud as the older radios. This made it more difficult to hear radio transmission in a high noise area. When the team mentioned the issue to licensee management, they informed the team that all officers had been issued earpieces that could be used daily. Further questioning by the team determined that licensee occupational safety staff had previously conducted an evaluation regarding the use of the earpieces in high noise areas. The radio earpieces were not an adequate substitute for proper hearing protection and if they wished, the officers could wear the earpieces under proper hearing protection in high noise areas.

  During security posts visits, the team noted there were several means of communication afforded to the officers. The officers were equipped with handheld portable radios and each post visited also contained a telephone.

Based on the review, The NRC determined there were no violations of NRC requirements identified. The licensee however, initiated an action in their Corrective Action Program, to inform all security force members of what communications equipment is authorized for day-to-day security operations.

- The NRC reviewed the use of mock intruders or adversaries during licensee security drills. The team asked the officers about what (if any) type of expectations are communicated to the officers before or during drills (e.g. any specific instructions which could impact the outcome). Many officers related they had never performed as an adversary during a drill nor had they heard any pre-instructions which could impact the results of the drill. The officers who had performed as adversaries, related that they were never provided any instruction prior to or during the drills which could impact the results. Most officers who had performed as adversaries and even some officers who had not, related the adversaries try their best to challenge the security officers defending the site because they live and have families in the area and are interested in making sure the site is properly defended.

  An issue previously reviewed by the licensee revealed that during one drill, an individual wanted to deviate from an approved drill scenario immediately prior to a drill and the drill leaders went to great lengths to explain the purpose and objectives of the drills to the individual. There was some concern that the unwillingness of management to deviate from the drill scenario was an attempt to “look good for visitors.” Those interviewed by the team, including the individual who suggested the deviation, shared with the NRC team that management had appropriately explained that the purpose of the drill scenario was to evaluate specific objectives and deviating from the scenario would impact those objectives. The team did not identify a regulatory issue associated with this item.

- The NRC reviewed licensee principles involving team training and officer recognition for licensee conducted security drills. The team reviewed critique forms that were completed by officers who participated in licensee drills conducted during 2005. There were no negative comments identified in the critiques regarding team training, nor was there an indication that team training was not being conducted. In fact, some of the drills were conducted with the entire shift present for the drill. From the team’s review of comments written by the officers and verbal interviews, it appeared the officers felt the drills achieved the intended training goals. There was one officer however, that mentioned that during a drill using laser technology and blank ammunition, he thought an officer had failed to confirm a target and inadvertently shot another team member with this equipment. The NRC was not able to substantiate that this event occurred.

- The NRC reviewed officer involvement regarding changes or issues with the site defensive strategy. Through interviews with the officers, some indicated they had concerns with prior strategies. Although changes were made and the strategies currently in place address those concerns, they felt management was not initially responsive to their concerns and therefore the changes were not timely. One individual related to the team that a consultant had commented to him that the site strategy was not sound. It should be noted that this issue has previously been reviewed by the licensee. The licensee’s appointed investigator reviewed the report of a security consultant that had visited the site on April 6 & 7, 2006, and was not able to find any issues with the defensive strategy as expressed in the concern. The licensee contacted the individuals who accompanied the consultant during most of his time on site. The

individuals indicated they never heard the consultant make any statement during his evaluation, that certain areas of the site could not be defended. As an additional measure, the licensee made contact with the consultant, who denied making a comment similar to the one identified in this issue.

Other officers were questioned about whether they felt the licensee defensive strategy had always provided the necessary level of protection for the site. The majority of the officers related they felt there had never been a time when the plant could not have been defended under any defensive strategy the licensee used. Some added that the recent changes were made from evaluating drills and testing out new positions. They felt these changes resulted from suggestions made by security personnel who knew the site the best.

The team determined that there were no violations of NRC requirements. The licensee entered this into their Corrective Action Program, to further evaluate recent protective strategy upgrades.

- The NRC visited a random sampling of the security posts located in the protected area, that were constructed to provide environmental protection to the officers. The officers who were questioned, related the posts kept them warm when it was cold, and cool when it was hot. It was generally felt these posts provided adequate protection from the elements. In the posts visited by the team, there did not appear to be any readily apparent signs of water leaking into electrical equipment or any flooding. The licensee stated that during the initial construction phase of the environmental posts, there were some extension cords that were moved for safety purposes, but when the structures were complete, there was no longer a need for these cords. The team did observe some pools of water in low spots on the roof that were in between an environmental post and several fighting positions located along the roof edge. Some of the pools of water on the roof were covering pathways that had been painted with anti-skid material but did not appear to present a safety hazard.

  From discussions with the security officers, it was stated, at times during heavy rain and wind, water would get blown into some of the gun ports in the Bullet Resistant Enclosure (BRE) posts, and trickle down the inside wall of the post. During an interview conducted with a security officer in a BRE, it was noted that during a recent rainstorm, water had blown into a gun port and settled on top of a heater. In accordance with the NRC and OSHA Memorandum Of Understanding, the licensee was contacted regarding the hazard. The licensee initiated actions to correct the water intrusion issue, including the installation of electrical ground fault interrupters in these enclosures. The team determined that there were no violations of NRC requirements associated with this item.

- During the security post visits, the team asked several officers about the maintenance program for additional security posts that had been constructed for environmental protection. The officers related there was a routine maintenance program for these posts, but stated sometimes it seemed it would be a while for things such as the air conditioning filters getting changed out. Although there are no NRC regulatory requirements regarding this issue, through discussions with the licensee it was determined that the periodicity for the maintenance of the security posts was conducted based on the location of the post. If the post was elevated, it fell under one schedule (around two months), and if on ground level, there was a difference schedule (six

months). The licensee had identified these differences and was working with site maintenance to try to get all the posts on the same schedule. In addition, to the maintenance schedule, the officers can inform a supervisor when something is in need of maintenance.

- During walkdowns of the security posts and discussions with the officers, there were no permanent posts that were observed or pointed out to the team, that did not have some type of enclosure or barrier to protect the officers from the elements. From time to time the officers conducted temporary duties while exposed to the elements; however, it appeared some type of protection was provided at permanent locations. The officers did express issues with the facilities provided at the vehicle checkpoint. Although the licensee had provided booths in each traffic lane for the officers, there was no overhead covering for the entire area if they were outside the booths directing traffic or checking identification badges. The officers felt there should also be an overhead covering to afford them protection from the sun and or inclement weather conditions. They had requested both an overhead covering and booths at the checkpoint area, but were only provided the booths. While this is an area outside of NRC requirements, the licensee has entered this issue into their Corrective Action Program and are evaluating ways to address this item.

- Several officers stated they were issued appropriate cold weather and rain gear to protect them from the environment. An officer stated that the licensee was not creating simulated conditions during Force-on-Force drills. One officer, believed the officers should be hosed down by a fire hose and put in a refrigerated vault for two hours and/or put in a sauna while wearing full gear for two hours to determine whether exposed posts afford protection. All other officers felt that having to undergo the aforementioned conditions to simulate conditions, were extreme and would serve no useful purpose. The team determined that STP security personnel do not deploy to other locations; therefore, the team felt that there was no need to simulate any other type of conditions. Drills can be conducted at any time during the year, during actual weather conditions the officers would encounter at the site. The officers related their exposure to various weather conditions on a daily basis was not as extreme as the proposed simulated conditions. They felt the equipment they had been issued provided sufficient protection from the elements. When questioned about feeling the effects of being too hot or too cold, the officers related they would contact a supervisor and self-identify to the supervisors if they were experiencing anything that might affect them negatively. The team determined that there were no NRC regulatory issues associated with this item.

- The NRC reviewed the site protocol for foggy weather conditions, related to security, at the site. The officers questioned indicated that there are issues from time to time with fog. Some related there has never been a time when it was so foggy that they could not see in their zones, yet others related there were times when they could not see more than 50 feet. Most related that from time to time the fog affected the use of Closed Circuit Television (CCTV) for assessment in some zones and when this happened, the supervisors implemented compensatory measures with additional posts and patrols and the static positions in proximity of the affected areas were directed to increase their vigilance of those areas. A number of the officers related that a couple of years ago more officers would be posted as compensatory measures, but that was no longer being done; however, they did not feel that someone could just walk into the Protected Area. Some of the officers related again, that they could always see their respective zones

and others related there were times they could not; however, if an alarm was received during these conditions, officers were dispatched to determine the cause of the alarm. It was also conveyed to the team that there were certain alarm systems affected by the fog that would remain in alarm status; however, this type of system is only installed in limited areas on the site and near continuously manned positions.

The team reviewed the licensee's security plan and procedures and determined the licensee was following the guidelines established in these documents for fog conditions. It should also be noted that the licensee has installed more than one type of intrusion detection equipment around the perimeter in coordination with security fencing, concertina wire, and other delay barriers. The licensee also uses several types of alternate technology for low lighting, fog or smoke conditions. Considering the overall measures available to the licensee, the capability of an individual walking right through an outside alarm area during these conditions without being detected is highly unlikely.

Additionally, it should be noted that based on lessons learned from both NRC and licensee force-on-force activities taking place at other sites over the past six to seven months, the licensee has been working with engineers and vendors to purchase additional equipment to enhance their day-to-day systems. The licensee has taken additional compensatory measure while evaluating additional equipment enhancements.

Although no NRC violations were identified and the security systems could perform their functions, the licensee entered this into their Corrective Action Program to further evaluate and implement compensatory measures equal to or better than the current measures concerning inclement weather.

- The NRC looked at containers where pre-positioned weapons were stored in hardened, bullet resistant locations on the site. Each location contained a container with a weapon, ammunition and other security related equipment. Each location is a security post, manned 24 hours a day, seven days a week by armed security personnel with access controlled by card readers. Some non-security personnel granted access into these rooms; however, all these individuals have gone through the required screening for unescorted access and are in a behavior observation program. Unless the individual is being escorted and controlled, all personnel who can use the card reader to enter the room, are authorized into the room. Several steps must be taken in order to remove the weapon stored in the containers. Additionally, there are other continuously manned security posts in direct proximity to these rooms.

  Although there were no violations of NRC requirements identified during this review, the licensee entered this issue in their Corrective Action Program, to determine if it was feasible to lock the containers or control the access to the areas differently.

- The NRC reviewed the licensee training related to vehicle search requirements. The review also included evaluating the simulated devices available for training use. It was determined that the security officers receive classroom training provided by the training instructors in form of lecture and visual presentations. The officers are also taken out in the field and performance evaluations are conducted during the training. If the officers do not meet the expected training goals during the search, remedial training is provided before they are signed off on that task. The types of training devices used during the

performance evaluations were considered appropriate by the team. The team contacted a security force supervisor who produced the training aids available to the shift lieutenants, for conducting limited scope drills at the shift level. This review also determined there was an adequate sampling of various training aids for use in training or evaluations.

There were no violations of NRC requirements identified during this review.

- The NRC reviewed the licensee process for searching vehicles containing construction materials. The team interviewed several officers, and learned that several months ago, a vehicle carrying Category II bulk material (fence fabric, posts, fasteners, etc.) had been escorted, in accordance site procedures and regulatory requirements, by an armed security officer into the Protected Area. Additionally, the materials had been ordered by Security and was expected. The vehicle was escorted through the Protected Area and parked within approximately 75 yards from a vital area. Because of the large volume of small articles, the material that could not be efficiently searched at the entry point. The material was then off-loaded from the truck by a fork lift, escorted outside the protected area to a warehouse, x-rayed, and then escorted back into the protected area. Initially, this issue was related to an officer believing that the officers involved in the process were unnecessarily subjected to a human performance error-type situation; however at a later point in time, one officer believed the actions were not in compliance with site procedures. This event had also previously been addressed by the licensee with a response provided to the NRC. The team reviewed the licensee security plans and procedures, and determined that the actions taken by the licensee did not violate any regulatory requirements.

  Although there was no violation associated with this issue, the licensee entered this into their Corrective Action Program to evaluate the effectiveness of the material search/control requirements, using industry best practices as part of the evaluation.

- The NRC reviewed the licensees process for obtaining escorted access to the Protected Area. During the review, it was determined that recently an individual had been issued a temporary identification card from the Texas Department of Corrections for identification purposes, until he received a regular state of Texas ID. The identification card had the words "convicted felon" on it that was clearly visible. The individual was working for a company that had been contracted to work at the site. When the individual presented the identification card for escorted access into the Protected Area to an officer, the officer noted the annotation on the card and contacted a supervisor for guidance. A check was conducted with the access authorization section and nothing was revealed that would deny entry. Additional management reviews and discussions were conducted which resulted in the determination that there was no regulatory reason for denying the individual escorted access to the Protected Area. Further discussion with the individual's escort and supervisor was conducted by the licensee, and it was agreed that in addition to the control required by the escort, the area supervisor would also maintain closer scrutiny over the work activities of the individual. The work was being conducted in an area with numerous other personnel in the area and there were other personnel in the area, if there was a need to summon assistance. The contractor completed the work without incident and the worker never entered a vital area. The team determined that the licensee followed the proper processes for making the determination for escorted access.

The team determined that there was no violation of NRC requirements associated with this item. The licensee entered this into their Corrective Action Program to determine if a mechanism needs to be in place when derogatory learned information is obtained during the processing of a visitor into the Protected Area.

- During a walkdown of security positions, the team crossed over several pedestrian bridges which provided pathways from one roof to another. It was noticed that one of the bridges flexed somewhat when being walked over, which was expressed as a concern by some officers; however, there were no obstacles or other safety related deficiencies observed on the bridges. When questioned about the bridges, the licensee related the bridges had been previously identified for replacement in the near future (2007 budget funds). The team noted there were other pathways that could be used (if an officer did not want to cross the bridges) that would not affect response times.

  This issue was also reviewed by the licensee in January of 2006. In that review, it was noted there were two Condition Reports (CRs) documenting material conditions associated with the walkways that were generated by Security Supervisors. Supporting documents indicated that interim actions were taken to lessen a tripping hazard immediately with permanent repairs completed six days later. Repairs correcting a loose step board, were completed on the same shift and date that it was reported. A qualified individual conducted an inspection of the walkways and determined the inspection tags were current, safe to use, and free from material defects.

  A concern of potential retaliation associated with this issue was explored by the team. The licensee determined that it did not involve the employee's participation in a Protected Activity, nonetheless an independent investigator, retained by the licensee, was contracted to perform a review of the issue. The NRC believes the issue was handled properly by the licensee.

- The team interviewed more than 75 security and other site personnel. These interviews assessed whether conditions existed that would challenge the establishment of a safety conscious work environment.

  While onsite, the inspectors reviewed the results of the "Site Wide Culture Assessment," performed by Management Insight Technologies in May 2005 to determine if any potential on-going concerns with the safety conscious work environment had been identified at the South Texas Project Electric Generating Station.

  Based on interviews, the inspectors concluded that a safety conscious work environment existed at the South Texas Project Electric Generating Station. In general, interviewed employees felt free to enter issues into the corrective action program, as well as, raise nuclear safety concerns to their supervision, the employee concerns program, and the NRC. During interviews, licensee personnel generally expressed confidence that nuclear safety issues that were entered into the corrective action program would be appropriately addressed. However, there were some issues identified that were outside NRC regulatory jurisdiction which, if not addressed by the licensee, could potentially impact the safety conscious work environment at South Texas Project. For example, issues associated with bereavement leave and the Wackenhut review of non-nuclear safety and security related issues forwarded to the South Texas

Project employee concern manager. The NRC will continue to monitor the safety conscious work environment at the South Texas Project Electric Generating Station.

- The NRC reviewed an issue associated with backdating a form associated with the licensee's Behavior Observation Program (BOP). This matter had previously been reviewed by the NRC and it was concluded there was no indication the supervisor told the individual what specific words he should write on the form or to fabricate any activities. The backdating of the form consisted of recalled observations covering a period of time. There was no information provided to the team during this review that would change that conclusion.