ALLEGATION BRIEFING SHEET
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FACILITIES/ORGANIZATIONS: Holtec International, Marlton NJ
US Tool and Die, Pittsburgh PA
Exelon (ComEd) Corp.,

STATEMENT OF ALLEGATION(S)/CONCERN(S):
Region III letter to NMSS characterized **Allegation 1** as: "You stated that a vendor" ....*(US Tool and Die)*... "modified spent fuel storage casks during the fabrication process by making repairs and/or accepted discrepancies "as is" without obtaining the required review and approval of the cask designer"... *(Holtec)*.... "You were concerned that this was contrary to Exelon's (ComEd) procedures".

The alleger's description of the allegation included: ....ComEd should have documentation of their review of the dry cask storage dispositions of Use-as-is and Repair that Holtec was sending to them.

Region III letter to NMSS characterized **Allegation 8** as: "You are concerned about the inadequate QA/QC oversight by the spent fuel storage cask design organization" *(Holtec)..."* and that this inadequate oversight has resulted in indeterminate quality and structural integrity of the casks. You stated that the fabricator's disposition of nonconformance condition as use-as-is, rework, and repair was a violation of the QA program for design control as specified in 10 CFR 71 and 10 CFR 72. You stated use-as-is and repair dispositions are design changes and should be evaluated and documented by engineering analysis. In addition, the fabricator dispositioned nonconformance conditions under its QA program without the design organizations consent".

The alleger's description of the allegation included: " I suspect whether Mr. Soler of Holtec performed any design reconciliation and documentation for all the drycask storage containers and associated parts impacted by disposition of use-as-is, repair, and rework at UST&D that were already built and delivered to nuclear plants.

BACKGROUND:

The alleger made contact with Region III. Region III initiated Allegation File RIII-2002-A-005 which consisted of 10 allegations. Allegations 1 and 8, described above were assigned to SFPO.

SFPO performed a routine inspection of US Tool and Die in February 2002. During that inspection the team examined the question of repair, rework, and use-as-is dispositions for CY 2001 and found the area adequate. SFPO did not look at the NCR dispositions or procedures in place at the times cited in the allegation, i.e. 1999-2000.

POTENTIAL SAFETY SIGNIFICANCE: Medium

Basis: If technically inadequate changes were made to the casks fabricated and delivered to licensees for spent fuel storage, then inadequate casks may be loaded with spent fuel and there may be a potential for release or accelerated fuel degradation. Also the internal spent fuel canisters may be used later in transportation containers for shipment to other repositories, posing a potential transportation risk.

GENERIC ISSUES: None

NEED FOR OI INVESTIGATION AND PRIORITY (High/Medium/Low): N/A for SFPO, done by RIII

PROPOSED TECHNICAL REVIEW PRIORITY:

___ (1) High Priority (immediate action required)
_X_ (2) High Priority Near Term (short term action required)
___ (3) Low Priority (longer-term action required)

NON-NMSS ISSUES (REGION, OGC, OE, ETC.)

Interface with Region III required since some actions will involve Excelon (ComEd), Dresden site.

PROPOSED RESOLUTION PLAN:

1. SFPO perform an inspection at Holtec International. Determine the nature of the Dry Storage Quality Group (DSQG) Audit findings at UST&D from CY 2000 related to the allegations. Review the Holtec and UST&D corrective actions for adequacy of defining the extent of the condition, immediate corrective action, and action to prevent recurrence. including lookback

2. Region III perform an inspection at ComEd, Dresden and determine the code and procedure requirements for reviewing and approving Supplier Deviation Requests (SDRs), and Nonconformance reports (NCRs) in regards to the obligations of the cask owner to review and approve use-as-is, and repair dispositions. Determine if ComEd is and was complying with the requirements during the period of the allegations.

Procurement Documents – Contractually binding documents that identify and define the requirements which items or services must meet in order to be considered acceptable by the purchaser.

Project – A planned series of activities including all actions necessary to provide, utilize, and maintain a facility or portion thereof.

Purchaser – The organization or organizations responsible for issuance and administration of a contract, subcontract, or purchase order.

Qualification (Personnel) – The characteristics or abilities gained through training or experience or both that enable an individual to perform a required function.

Qualified Party – A person or organization competent and recognized as knowledgeable to perform certain functions.

Qualified Procedure – A procedure which incorporates all applicable codes and standards, manufacturer's parameters, and engineering specifications and has been proven adequate for its intended purpose.

Quality Assurance – All those planned and systematic actions necessary to provide adequate confidence that an item or a facility will perform satisfactorily in service.

Quality Control – Those quality assurance actions which provide a means to control and measure the characteristics of an item, process, or facility to established requirements.

Receiving – Taking delivery of an item at a designated location.

Repair – The process of restoring a nonconforming characteristic to a condition such that the capability of an item to function reliably and safely is unimpaired, even though that item still may not conform to the original requirement.

Report – Something (document) that gives information for record purposes.

Rework – The process by which a nonconforming item is made to conform to a prior specified requirement by completion, remachining, reassembling or other corrective means.

Source Surveillance – A review, observation, or inspection for the purpose of verifying that an action has been accomplished as specified at the location of material procurement or manufacture.

Specification – A concise statement of a set of requirements to be satisfied by a product, a material or process indicating, whenever appropriate, the procedure by means of which it may be determined whether the requirements given are satisfied.

Standard – The result of a particular standardization effort approved by a recognized authority.

Storage – The act of holding items at the construction site or in an area other than its permanent location in the plant.

Subsystem – A group of assemblies or components or both combined to perform a single function.

System – A group of subsystems united by some interaction or interdependence, performing many duties but functioning as a single unit.

System Performance Test – A test performed on a completed system including electric, instrumentation, controls, fluid and mechanical subsystems under normal or simulated normal process conditions such as temperature, flow, level, and pressure.

Testing – The determination or verification of the capability of an item to meet specified requirements by subjecting the item to a set of physical, chemical, environmental or operating conditions.

Transit – A state of being conveyed or transported from one place to another.

Transit Carrier (Open) – Trucks, trailers, railroad cars, barges, aircraft or ships which do not afford items protection from the environment.

Transit Carrier (Closed) – Trucks, trailers, railroad cars, barges, aircraft or ships which do provide protection of items from the environment by nature of their closed design.

Trip-Point – A predetermined critical level at which a bistable device changes state to indicate that the quantity under surveillance has reached the selected value.

Use-as-is – A disposition which may be imposed for a nonconformance when it can be established that the discrepancy will result in no adverse conditions and that the item under consideration will continue to meet all engineering functional requirements including performance, maintainability, fit, and safety.

Verification – An act of confirming, substantiating and assuring that an activity or condition has been implemented in conformance with the specified requirements.

Qualified Procedure. A procedure that has been demonstrated to meet the specified requirements for its intended purpose.

Quality Assurance. As used in this Section, quality assurance comprises all those planned and systematic actions necessary to provide adequate confidence that all items designed and constructed are in accordance with the rules of this Section.

Quality Assurance Manual. A written document which describes a Quality Assurance Program.

Quality Assurance Program. A controlled system of planned and systematic actions required to provide adequate confidence that items designed and constructed are in accordance with the rules of the Code.

Quality System Certificate. A Certificate issued by the Society which permits an organization to perform specified Material Manufacturer or Material Supplier activities in accordance with Code requirements.

Quality System Program. A documented system of actions required to provide adequate confidence that materials conform to the requirements of the material specification and the rules of Section III.

Regulatory Authority. A Federal Government Agency, such as the United States Nuclear Regulatory Commission, empowered to issue and enforce regulations concerning the design, construction, and operation of nuclear power plants.

Repair. The process of physically restoring a nonconformance to a condition such that an item complies with Code requirements.

Rework. Refer to *Repair.*

Service. An activity performed by a subcontractor such as designing, rigging, temporary bolting, and nondestructive examination.

Service Limits. Stress and stress intensity limits applicable to Service Loadings given in the Design Specification.

Shop and Field Drawings. Drawings provided by the Constructor or Fabricator (Division 2) which describe construction, fabrication, and installation details, physical dimensions, arrangements, and any significant engineering features needed to establish conformance to the Design Drawings, Construction Specification, and this Section.

Society. The American Society of Mechanical Engineers, Three Park Avenue, New York, NY 10016.

Source Material. For Section III, metallic products used for conversion to or qualification as material by a Certificate Holder or Material Organization.

Special Process. A process, the results of which are highly dependent on the control of the process or skill of the operator, or both.

Standard Support. A support consisting of one or more units usually referred to as catalog items and generally mass produced.

Supplier. Any individual or organization that furnishes materials or services in accordance with a procurement document.

Support. A metal element, excluding an intervening element, which transmits loads between nuclear power plant components and the building structure. A support may be either a component support or a piping support.

Survey. A documented evaluation of an organization's ability to perform Code activities as verified by a determination of the adequacy of the organization's quality program and by a review of the implementation of that program at the location of the work.

Testing. An element of verification for the determination of the capability of an item to meet specified requirements by subjecting the item to a set of physical, chemical, environmental, or operating conditions.

Traceability. The ability to verify the history, location, or application of an item by means of recorded identification.

Unqualified Source Material. Source material not produced by a Certificate Holder, Material Organization, or approved supplier in accordance with the requirements of Section III, NCA-3800.

Use-as-is. A disposition assigned an item previously identified as nonconforming after reconciling Design Output Documents with the item's as-built condition and verifying that applicable requirements of this Section have been met.

Verification. A review to ensure that activities have been performed and documented in accordance with applicable requirements.

NCA-3552 Design Output Documents for Parts

When the N Certificate Holder purchases parts from an NPT Certificate Holder, it is the responsibility of the N Certificate Holder to provide or cause to be provided the calculations for the parts and to incorporate them into the Design Output Documents.

NCA-3553 Design Output Documents for Appurtenances

The Design Output Documents for each appurtenance which is to be attached to a completed component shall be provided unless they are already included in the component Design Output Documents.

NCA-3554 Modification of Documents and Reconciliation With Design Report

Any modification of any document used for construction, from the corresponding document used for design analysis, shall be reconciled with the Design Report by the person or organization responsible for the design. A revision or addenda to the Design Report shall be prepared and (if required by NCA-3551.1) certified to indicate the basis on which this has been accomplished. All such revised documentation shall be filed with the completed Design Report.

NCA-3555 Certification of Design Report

(a) The Design Report for Class 1 components and component and piping supports, Class CS core support structures, Class MC vessels and Class MC component supports, Class 2 vessels designed to NC-3200 (NC-3131.1), or Class 2 or Class 3 components designed to Service Loadings shall be certified by one or more Registered Professional Engineers competent in the applicable field of design and qualified in accordance with the requirements of ANSI/ASME N626.3-1988, Qualifications and Duties of Specialized Professional Engineers. The Design Report shall be certified only after all design requirements of this Section have been met. Such Registered Professional Engineers shall be other than the individuals certifying the Design Specifications (NCA-3255) but are not required by these rules to be independent of the organization holding the Certificate.

(b) It is the intent of this Section that the certification of the Design Report shall in no way relieve the N Certificate Holder of the responsibility for the structural integrity of the completed item for the conditions stated in the Design Specifications.

NCA-3556 Submittal of Design Report for Owner Review

The N Certificate Holder shall submit to the Owner or his designee a copy of the completed Design Report for all components and supports for review and documentation of review to the extent required by NCA-3260.

NCA-3557 Availability of Design Report

The N Certificate Holder shall make a copy of the completed Design Report, Load Capacity Data Sheets, Certified Design Report Summaries, and the drawings used for construction available to the Inspector.

NCA-3560 RESPONSIBILITY FOR QUALITY ASSURANCE

NCA-3561 Scope of Responsibilities

(a) The N Certificate Holder shall be responsible for surveying, qualifying, and auditing suppliers of subcontracted services (NCA-3125), including nondestructive examination contractors, Material Suppliers, and Material Manufacturers. Material Suppliers or Material Manufacturers holding Quality System Certificates (Materials), and Certificate Holders whose scope includes supply or manufacture of materials, need not be surveyed nor audited for work or material covered by the scope of their Certificate. Subcontractors holding an appropriate Certificate of Authorization need not be surveyed nor audited for work within the scope of the subcontractor's Certificate. N or NV Certificate Holders may supply replacement material without material supply being shown in the scope of their Certificate provided supply of replacement material is included in their Quality Assurance Program, the replacement material conforms to all applicable requirements of this Section, and are exclusively for incorporation into items originally manufactured or fabricated and furnished by the N or NV Certificate Holders under their Certificate.

(b) An N Certificate Holder may qualify vendors of subcontracted services (NCA-3125) other than those requiring a Certificate of Authorization, such as Material Manufacturers or Material Suppliers, for another Certificate Holder doing work for that N Certificate Holder. The qualification documentation shall be supplied to the other Certificate Holder prior to their use of the subcontracted service, Material Manufacturer, or Material Supplier.

(c) An N Certificate Holder may subcontract furnace brazing operations involving uniform heating to an

NCA-3254 Boundaries of Jurisdiction

In order to define the boundaries of components with respect to adjacent components and other structures, the Design Specifications shall include:

(a) the locations of each such boundary;

(b) the forces, moments, strains, or displacements which are imposed at each such boundary;

(c) the structural characteristics of the attached components or structures, whether or not they are within this Section's jurisdiction when such components or structures provide constraints to the movement of components or appurtenances;

(d) when the foundation support is constructed as an integral part of the concrete reactor vessel or concrete containment, it shall be included within this Section's Division 2 jurisdiction to the extent required by NCA-2132.

NCA-3254.1 Definition of Division 1 Boundaries

(a) The boundaries for Class 1 components are given in NB-1130.

(b) The boundaries for Class 2 components are given in NC-1130.

(c) The boundaries for Class 3 components are given in ND-1130.

(d) The boundaries for Metal Containment Vessels are given in NE-1132.

(e) The boundaries for Component Supports are given in NF-1130.

(f) The boundaries for Core Support Structures are given in NG-1130.

NCA-3254.2 Definition of Division 2 Boundaries. The Design Specification shall define the boundaries of Division 2 in accordance with the limits defined in NCA-1120; it shall also show the external boundaries of the component with respect to its supporting structures. Where the support is constructed as an integral part of the concrete vessel or the concrete containment, it shall be included within the jurisdiction of Division 2 to the extent required by NCA-1120. The Design Specification shall include the specific dimensional location of each boundary, including the boundaries for parts and appurtenances designated to meet the requirements of Division 1.

NCA-3255 Certification of the Design Specifications

The Design Specifications shall be certified to be correct and complete and to be in compliance with the requirements of NCA-3250 by one or more Registered Professional Engineers, competent in the applicable field of design and related nuclear power plant requirements and qualified in accordance with the requirements of ANSI/ASME N626.3-1988, Qualifications and Duties of Specialized Professional Engineers. These Registered Professional Engineers are not required to be independent of the organization preparing the Design Specifications. Document distribution for Division 2 construction is shown in Table NCA-3200-1.

NCA-3256 Filing of Design Specifications

(a) The Design Specifications in their entirety shall become a principal document governing design and construction of items. A copy of the Design Specification shall be made available to the Inspector at the manufacturing site before fabrication begins, and a copy shall be filed at the location of the installation and made available to the enforcement authorities having jurisdiction over the plant installation before components or appurtenances are placed in service. In the case of parts, piping subassemblies, appurtenances, and component and piping supports, the Design Specifications need not be made available to the Inspector at the fabrication site (NCA-3251). However, the applicable data from the Design Specifications which form the basis for fabrication shall be made available to the Inspector at the fabrication site. Document distribution for Division 2 construction is shown in Table NCA-3200-1.

(b) For pumps and valves 4 in. nominal pipe size and less, for linear supports used as mechanical snubbers, and for standard supports, the Certificate Holder may provide his own Design Specification in accordance with NCA-3252 as a basis for construction. Prior to installation, the Owner or his designee shall be responsible for reconciling the Certificate Holder's Design Specification with his own Design Specification.

NCA-3260 REVIEW OF DESIGN REPORT

(a) The Design Report which the Certificate Holder or the Designer provides shall be reviewed by the Owner or his designee to determine that all the Design and Service Loadings as stated in the Design Specification have been evaluated, and that the acceptance criteria explicitly provided for in this Section, or additional acceptance criteria permitted by this Section when established in the Design Specification, associated with the specified Design and Service Conditions, have been considered. The responsibility for the method of analysis and the accuracy of the Design Report remains with the Certificate Holder or the Designer.