



MAR 3 1 2015

PUBLIC SERVICE COMMISSION

HAND DELIVERED

March 31, 2015

Mr. Jeff Derouen Executive Director Public Service Commission 211 Sower Boulevard Frankfort, Kentucky 40602

Re: Case No. 2010-00449

Dear Mr. Derouen:

Please find enclosed for filing with the Commission in the above-referenced case, an original and ten copies of the Smith Unit 1 Asset Cost Mitigation Report (sixteenth report) of East Kentucky Power Cooperative, Inc. ("EKPC"). This report is being filed pursuant to the Commission's Order of February 28, 2011.

Also included in this report are EKPC's responses to seven questions posed in your letter of February 11, 2015. Should you require further clarification of any of the responses provided, please do not hesitate to contact me.

Very truly yours,

Patrick C. Woods

Patrick C. Woods Director, Regulatory and Compliance Services

Enclosures

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A Touchstone Energy Cooperative

East Kentucky Power Cooperative, Inc.

Smith Unit 1 Asset Cost Mitigation Report

March 31, 2015 (Sixteenth Mitigation Report)

In accordance with the Commission's Order dated February 28, 2011 in Case No. 2010-00449, the following is a report summarizing the status of East Kentucky Power Cooperative Inc.'s ("EKPC") mitigation efforts to reduce the balance of the regulatory asset through the sale of the Smith Unit 1 physical assets as authorized by a Commission Order on March 5, 2013 in Case No. 2013-00005.

- As of March 27, 2015, the regulatory asset balance relating to Smith Unit 1 was \$149,034,981.58. This balance includes expenses associated with marketing the assets and preserving the assets for potential sale.
- As of March 25, 2015, three-hundred-forty-eight (348) inquiries regarding the Smith assets have been received. Sixty-Seven (67) of the inquirers have executed confidentiality agreements with EKPC, enabling EKPC to share technical information regarding the assets. Fifteen (15) prospects have conducted site visits.

In a February 11, 2015 letter from Mr. Jeff Derouen, EKPC was asked to specifically address in this report seven additional questions. EKPC's responses to these questions are as follows:

1. Describe the physical condition of the remaining assets.

The remaining Smith 1 assets are being maintained in accordance with storage recommendations from the Original Equipment Manufacturer, Alstom Power ("Alstom"), and are inspected annually by Alstom. Alstom's latest inspection report, in October 2014, states. "The materials viewed on this inspection trip were in good condition and readily usable for construction utilization with minor conditioning required."

2. Describe how the assets are maintained and/or stored.

The assets are being maintained and stored per Alstom's long-term maintenance and storage plan that was developed for these assets. Included with this report is the Alstom-developed maintenance plan that provides guidelines to be followed to store and maintain the assets.

3. Identify the annual cost associated with the maintenance or storage.

The annual average cost of storing and maintaining the assets for the past five years has been less than \$200,000, and is not expected to exceed that amount in future years.

 Identify the criteria used to determine the interest of potential buyers in acquiring the equipment.

EKPC pursues each inquiry with the assumption that the interest may lead to a potential sales transaction. As a standard, we and the brokers provide specifications and a listing of the equipment that is for sale as well as answer a myriad of questions that arise such as coal specifications, remaining equipment to be purchased from Alstom, plant design information, etc. If the buyer remains interested, we encourage an on-site inspection of the assets and engagement with Stanley Engineering, who was the original owner's engineer for the project. Later in the process, price and term negotiations are conducted in order to achieve mutual agreement. We have reached the price and term negotiation phase with three different parties, but have been unable to reach a full agreement.

5. Describe EKPC's marketing efforts.

EKPC is currently working with ten different equipment brokers in an effort to sell the Smith 1 assets. All of these brokers have contacts around the world and within our targeted 60hz markets. Their marketing approaches differ but include various forms of advertising and networking, including email flyers, phone networking, webpage listings, international and domestic trade shows. In addition, we field inquiries that may come directly from a prospective buyer without a broker. We assume that each inquiry received may be a potential project that is well-suited to utilize the Smith 1 assets.

Brokers engaged:

Deal Maker, Inc. (USA) Dillingham Energy Services (USA) International Marketing Specialist, Inc, (USA) Joel De La Garza (USA) Josueth Gonzalez Cia Ltda (Ecuador) Manhattan Energy Group (USA) Resource Management Associates, Inc. (USA) Thomassen Amcot International, LLC (USA) Vancouver Diesel Consulting, Inc. (Canada) Vanta Coda Consultant, Inc. (USA)

6. Explain at what point EKPC plans to cease efforts to market the remaining assets.

Currently, EKPC is actively working with ten brokers with potential interested buyers primarily in international markets. Discussions indicate the potential buyers have valid and viable projects. As long as there remain prospective buyers and associated suitable site conditions appropriate for constructing and operating the Smith assets, EKPC will continue to offer the assets for sale through brokered arrangements. EKPC is aware that the possibilities of a transaction decline with each passing year and ultimately the assets have a limited shelf-life. In the event the assets remain unsold within the next 24 months, EKPC will re-evaluate its position and advise the Commission.

Identify any assets (or their value) that can be used by EKPC at any of the other generating stations.

The following is a list of potential spare parts that can be used by EKPC at its other generating stations:

HP Heaters LP Heaters Generator & Turbine and all Components **Fluidizing Air Nozzles** Vortex Finder Plates/Hardware **Two Tube Handcuffs** Seal Pot Nozzle Assys. Silo Silo - SS Liner Silo Cylinder Silo Cone Sections Whizzer Separator Assys., Pipe, Hardware, & Supports Sorbent Mill VS Drivers **Return Air Housings** Silo Pants Silo Skirts Mill - Gears Boxes, Shafts, & Couplings Mill - Sole Plates, Oil Journals, Hardware, & Grinding Roll Mill Base & Bearing Assy. Mill - 8 pcs, 24" gate valves **Silo Roof Sections** 2pcs - Sorbent Mill Maint. Hoist 1pc - Ash Screw Maint, Hoist Ash Control Valve - Shafts, Hardware, Tracking Fuel Feeder, Valves, and Oil Hardware **Furnace Nozzle Assys** Feeder Downspouts, Exp. Joints

Fluidizing Air Blowers 2pcs - 450HP Mill Motors Headers, Loose Tubes Furnace Roof & BP Panels Evap. Panel FHBE SH Loose Tubes FBHE RH Horizontal Tube Assys. 10pcs, FBHE SH Horizontal Assys. 2 Crates Fluidizing Air Nozzles

EKPC has the total cost of each of the systems that was purchased for the Smith 1 project. But because Smith Unit 1 was canceled and the project was not executed, account codes showing the breakdown cost of components that make up each system were not generated by the participating equipment suppliers. Therefore, the individual value of each of these component spare parts has not been determined. However, EKPC is in the process of attempting to determine these values, and will supplement this report with those values when available.

EKPC will continue to pursue all avenues available to reduce the balance of the Smith Unit 1 Regulatory Asset by selling the Smith Unit 1 assets. But as described in the answer to Question #6, above, should those assets remain unsold for another 24 months, EKPC will reevaluate its current strategy and advise the Commission accordingly.

1.0 Purpose

The purpose is to provide the minimum guidelines necessary for field storage of Alstom Power boiler components by the material custodian to ensure their usefulness in satisfying the applicable code requirements as boiler components after a storage period of 8 years along with frequent site inspections

2.0 Scope and Definitions

This recommendation applies to boiler components supplied by Alstom Power.

4.0 Engineering Information

4.1 Specifying Paint Requirements

Components were originally painted per the requirements shown on Drawings C-985-4262 and drawing C-985-4263

- 4.2 Drawing B-985-0380 has the list of current approved coatings
- 4.3 Original paint used on field stored equipment:
 - 4.3.1 On the structural steel, buckstays, and FBHE Carboline CarboZinc 11
 - 4.3.2 On the ducts and links Sherwin Williams RIP Red Oxide Primer B50RV2313 and Sherwin Williams Red Oxide Primer E61RC21. The E61RC21 has proven to be the better performer at the Kentucky site.
 - 4.3.3 Pressure parts are coated with Quakercoat 317. This is a clear coating, which is tinted with red white or black pigments. The yellow spray paint on the pressure parts indicates T-91 material.
- 4.4 Repair Procedures
 - 4.4.1 Red Oxide Primer Minimum surface preparation SSPC SP-2 (hand tool clean) and SSPC SP-3 (power tool clean) Brush or spray Sherwin Williams E61RC21, which is compatible with both Sherwin Williams paints used on the material at site.
 - 4.4.2 Pressure parts Minimum surface preparation SSPC SP-2 (hand tool clean) and SSPC-SP-3 Power tool clean. Re apply Quakercoat 317 using a brush.
 - 4.4.3 Structural Steel and Buckstays with Inorganic zinc coating. Minimum surface preparation SSPC SP-6 (commercial blast clean). Follow paint manufacturers requirements for stipple depth, relative humidity, DFT and recoating times.

7.0 Site Selection and/or Preparation

7.1 To the extent allowed by the Customer, the material custodian should select an open, level site free of trees and protected from flooding with good drainage. Site shall have provisions for both indoor and outdoor storage, receiving, inspecting, and maintaining the components being stored. If necessary, the material custodian shall have the site cleared, leveled and/or filled with drainable material like gravel, as

November 13, 2012

appropriate. The longer the planned storage period, the more appropriate it is to install crushed stone or sloped tarmac surface for outdoor storage. This will help minimize dirt accumulation from dust and splatter as well as inhibiting vegetation growth.

8.0 General Requirements for Storage

8.1 Wood cribbing shall be painted or treated with a wood preservative.

8.2 Wood cribbing or supports shall be of sufficient height to keep components free of mud, water and vegetation.

8.3 Components shall be sloped for drainage and positioned to avoid the collection of water.

8.4 Stacked items shall be separated by spacers and positioned to permit identification, inspection and necessary maintenance. The spacers and cribbing must be in a vertical line and in sufficient number to provide adequate support of the material to prevent damage. The use of non-moisture retaining spacers may help reduce spot corrosion.

8.5 All water absorbing wrappings or pads used for protection during shipping shall be removed.

8.6 The custodian shall maintain an inventory and location map (per paragraph 10.1) to facilitate inspection and erection.

8.7 Items shall be frequently inspected at intervals not greater than 6 months to determine if there has been any deterioration of the component or protective system, which requires maintenance or changes to storage conditions to protect the items from future deterioration. Only if there is evidence that there is deterioration of the component or protective system shall any sealed protective system be opened for internal inspection. Following internal inspection, and any necessary maintenance to components and/or protective system, the opened sealing material shall be reinstalled or replaced as required. These inspections shall be documented on Report of Inspection Forms.

8.8 When it becomes apparent that a reapplication of protective coatings is required, the subject area should be properly prepared and recoated per the "Shop Painting" drawings or the Supplier's instructions, if applicable. Unpainted machined surfaces shall be recoated with rust inhibitor and protected from the weather as necessary. Any piece marks made illegible or removed during storage, inspection or maintenance shall be reapplied or replaced as required.

8.9 Components requiring nitrogen purge shall be maintained under positive pressure and the material custodian shall make provisions to assure the nitrogen purge is maintained. If such components allow internal access to personnel, they shall have signs warning of the hazardous atmosphere.

8.10 Dampers must be stored in a flat position.

8.11 Dampers may be stacked if adequate cribbing is provided to prevent twisting and damage to frames, blades or linkage.

9.0 Methods of Storage

9.1 Indoor Storage Methods

9.1.1 Type "A": Stored on concrete slab floor or metal shelving in a completely enclosed, weather tight building. The building shall have adequate environmental controls to maintain the following conditions:

- 1. Uniform room temperature:
 - A. Controlled within a range of 40° F to 115° F
 - B. Maintained at least 10° F above the dew point
- 2. Relative humidity not to exceed 50%
- 3. At least 50 foot-candles of lighting illumination at the task
- 4. Little or no dust accumulation
- 5. No harmful fumes
- 6. Little or no ambient vibration
- 7. No insects, rodents, or other animals

Note: Recording devices for reporting temperature and humidity must be used.

9.1.2 Type "B": Stored on a concrete slab floor or metal shelving in a completely enclosed, weather tight building. The building shall have adequate environmental controls to maintain the following conditions:

- 1. Uniform room temperature:
 - A. Controlled within a range of 40° F to 115° F
 - B. Maintained at least 10° F above the dew point
- 2. No humidity control required
- 3. At least 50 foot-candles of lighting illumination at the task
- 4. Little or no dust accumulation
- 5. No harmful fumes
- 6. Little or no ambient vibration
- 7. No insects, rodents, or other animals

Note: Recording devices for reporting temperature must be used.

9.1.3 Type "C": Stored in a completely enclosed, weather tight building with consideration given to adequacy of ventilation to minimize condensation. Floors may be compact earth or better. The building shall have adequate environmental controls to maintain the following conditions:

- 1. No temperature control required
- 2. No humidity control required
- 3. Natural lighting acceptable
- 4. Little or not dust accumulation
- 5. No harmful fumes
- 6. Little or no ambient vibration
- 7. No insects, rodents, or other animals

Sea-Land type containers, unless ventilated, are discouraged from being used as Type "C" storage other than short term.

9.1.4 In all cases, the material must be placed on dunnage of sufficient height to prevent rising water from reaching the stored material.

9.2 Outdoor Storage Methods

9.2.1 Type "D"

Type "D" is for components with Vapor Corrosion Inhibitor (VCI) or nitrogen purge.

9.2.2 Type "E"

Type "E" is for components without Vapor Corrosion Inhibitor (VCI) or nitrogen purge.

9.2.3 Type "F"

Type "F" is for components with special storage requirements. This could be an outdoor or indoor storage requirement. Refer to specific contract, owner, and/or supplier requirements.

9.2.4 All Outdoor Storage Requirements

The following minimum conditions must be met or exceeded for all (Type "D", "E" or "F") outdoor storage:

 Components shall be placed on dunnage of sufficient height to prevent rising water from reaching the stored material

Components shall be positioned for drainage, inspection, and maintenance.

3. Protective coatings, seals, and caps shall remain in place and be maintained as applicable.

4. If Mechanical Equipment that should be stored indoors has to be stored outdoors (i.e. hoists, soot blowers, etc.) it must be covered and vented for air circulation.

Notes:

1) When dictated by local environmental conditions, coverings may also be required. The custodian shall provide protection from adverse environmental conditions such as blowing dust, sand, occasional rain or snow, blowing debris, fungus or plant growth, moisture (impregnated with salts or other chemicals), fumes, coal, ash, and chemical dust soot.

2) If inspections show water collecting in channels or other structural stiffeners on stored ductwork sections, the material custodian may drill 3/8" (10 mm) diameter weep holes at the low points of the stiffeners or gusset plates as applicable. This also applies on wide flanges that have gusset plates.

MATERIAL STORAGE AND MAINTENANCE PROCEDURES Smith Site Trapp, KY November 13, 2012 11.0 <u>Storage Instructions</u>

The storage guidelines listed below are broad and general in nature. Specific instruction(s) supplied with components are to take precedence over the following:

11.1 Storage of Pressure Parts and Valves

11.1.1 Pressure parts and other items without VCI or nitrogen purging should be sloped for drainage. Large piping, links, and headers should be positioned such that one aperture will act as a drain and the piece should be pitched to that point. If the selected drain apertures are covered, the faces of their caps and closures shall be punctured at the 6 o'clock position to allow for ventilation and to prevent the collection of moisture on the internal surfaces. Do not puncture horizontal faces of caps exposed to the weather (rain/snow) for Type "E" storage.

11.1.2 Pressure parts and other items shipped with VCI or nitrogen purging [Type "D" storage] should be sloped for drainage (external and if the seals leak, internal) but shall not have their protective caps punched (vs. paragraph 11.1.1 above). Components requiring nitrogen purge shall be maintained under positive pressure and the custodian shall make provisions to assure the nitrogen purge is maintained.

11.1.3 During the required inspections every 6 months (see paragraph 8.7 above) components with and without VCI powder, should be inspected to the extent practical. If the seals are found damaged or missing then the inside of the component should be checked. If the caps or channels are missing, cracked or unsecured, and pitting is found on any weld end preparations (preps), they should be cleaned and repainted both inside and out. The materials used for this purpose should be in accordance with the documents referenced in paragraph 4.1. If there is significant rust inside the component, Contact Windsor's Water Chemistry group for further instructions. After all maintenance work is completed to the stored component, reseal the openings.

<u>Note:</u> Generally it is very difficult to remove caps without destroying them so replacements must be available at the time of any internal inspections. For nitrogen purged or VCI protected pressure parts that are large enough to enter, there shall be signs warning of the hazardous atmosphere inside.

Unless requested to do so by Windsor's Water Chemistry group, it will not be necessary to install more VCI powder. If the water chemistry group states that it is necessary to replenish the powder, use Cortec VpCI-309 SF powder. The SF is for silica-free. **Cortec tablets are not allowed in pressure parts.** Regarding the powder, see Standard 3-2000 for calculating the required quantities.

11.1.4 Weld end preps require inspection every three months. Half of these inspections should be performed during the 6 month inspections per paragraph 11.1.3. In between the 6 month inspections, repeat the paragraph 11.1.3 inspections of all weld prep seals.

11.1.5 Valves with actuators, drives and/or switches shall be stored indoors as Type A and positioned to prevent condensate or dirt from accumulating on the seating surface or wiring. Valves without actuators, drives, or switches, may be stored as Type C and positioned to prevent

water or dirt from accumulating on the seating surface.

11.2 Storage of Motors

11.2.1 Motors shall be stored indoors. Motors furnished with heaters shall have the heaters energized during storage. To ensure free movement as a minimum the shafts shall be rotated quarterly, but more frequently if necessary to meet Supplier or Customer requirements. Record the dates of shaft rotations.

11.2.2 Motors shall be mega ohm tested in accordance with the supplier's requirements, or Customer's requirements when supplier requirements are less stringent or are not provided.

11.3 Storage of Machined Surfaces and Rotating Equipment

11.3.1 Machined surfaces, fitting holes, nipples, and tube ends should have a protective cover attached while in storage and awaiting installation.

11.3.2 Bearings are to be stored indoors.

11.3.3 Trunnions are to be treated with a rust preventive coating and are to be stored

16.0 Site Inspection

- 16.1 Regular scheduled material inspection reviews are required to observe issues and make corrections and repairs as necessary.
- 16.2 Intervals of 3 or 4 times a year are recommended.

17.0 Documentation

17.1 All phases of storage and inspection shall be documented including:

17.1.1 Material receiving, initial inspection, unloading and repairs to damaged parts.

17.1.2 Initial preparation for storage.

17.1.3 Types of storage and locations agreed upon.

17.1.4 Frequency and types of inspections agreed upon. This will depend on the type of storage selected.

17.1.5 Inventory and Location Map.

17.1.6 Field Inspection reports.

16.2 Records of Alstom supplied components shall be maintained by the material custodian. The records shall be available at all times to the Alstom site representative. These records must be retained as long as the Construction Contractor is on site.

Attachment "A"

Recommended Field Storage for Field Storage of Boiler Components

	Storage Type	Remarks
AH - Air Heater		For detail listing, see Standard No. 9-2003, Index 11.6.
AH - Casing	E	
AH - Cleaning Device	A	
AH - Controls Systems-Leakage, Hot Spot	В	
AH - Drive Unit	A	
AH - Elements	Е	
AH - Misc. Parts and Fittings	A	
AH - Seals	А	
AH - Steam Coil	D	
AH - Structures	E	
AH - Tubular	E	
Auxiliary Boiler	D	Nitrogen Purge Blanket for internal surfaces of pressure part
BMS – Burner Management System		
BMS - Cabinet Assembly	А	
BMS - Cables	В	
BMS - Control Cards	A	
BMS - Power Supplies	А	
Buckstay		
Buckstay - Beams, levelers, corner assy.	E	
Buckstay - Boiler Guides	E	
Buckstay - Bolts, Nuts, Washers	C	
BWCP – Boiler Water Circulating Pump or Recirculating Pump		

up to 8 years.

Component Description	Storage	Remarks
	Туре	
BWCP - Circulating Pump w/motor	B	Refer to paragraph 11.2
BWCP - Circulating Pump Cover Plate &	С	
Gasket		
BWCP - Fill and Purge Cooler	B	
BWCP - Fill & Purge Filter	B	
BWCP - Motor Cooler	В	
BWCP – Volute (loose)	В	
Casing		
Casing - Backpass/Furnace (skin)	E	
Casing - Door Ceramic Board	С	
Casing - Door Mounting Material	С	
Casing - Doors (Encl, Steel, Observation, Water Cooled)	E	Covered and vented for air circulation.
Casing - Expansion Joints	E	
Casing - Field Welded Attachments	E	
Casing - Furnace Bottom Hopper Seals	E	
Casing - Roof Skin	E	
Drive -(Electric, Hydraulic, Pneumatic)		
Drive - Controls	В	
Drive - Linkages	C/B	
Drive - Unit	В	
Drive - Variable Frequency (Classifier)	А	
Duct		
Duct - Access Doors (not insulated)	С	
Duct - Cold, Hot, Tempering, Air, Gas	E	
Duct - Cyclones & Vortex Finder	E	
Duct - Dampers (w/o electric)	c	
Duct - Dampers (Limit Switches/Electric)	В	
Duct - Economizer Bypass Module	E	
Duct - Expansion Joints (Fabric/Metal)	C	
Duct – Fluidizing Air Nozzles,	č	
Duct - Gas Distribution Baffles	Ē	1
Duct - GOD Expansion Plates	Ē	
Duct - Hoppers	Ē	
Duct - Inlet /Outlet/Crossover	E	
Duct - Plenum	E	
Duct - Primary/Secondary	F	
Duct - SCR Chamber	E	
Duct - Seal Air, Scanner Air,	E	
Duct - Seal Pots	E	
Duct - Slide Bearings	C	
Duci - Olive Dealiliga	<u> </u>	

Component Description	Storage Type	Remarks
Duct - Solids Return	E	
Duct - Turning Vanes	E	
Electrical		
Electrical - Cables-Control/Power	В	
Electrical - Conduit/Trays	С	
Electrical - Heat Tracing	В	
Electrical - Lighting/Panels	В	
Electrical - Panels	В	
Electrical - Switchgear	В	
Electrical - Transformers	В	
Electronic -Computer, CPU, PLC,	А	
Elevator		
Elevator - Cables	С	
Elevator - Car	В	
Elevator - Controls	А	
Elevator - Drive Unit (w/motor)	A	
Elevator – Misc.	С	
Elevator - Guides, Trucks	С	
Enclosure		
Enclosure - Access Doors (not insulated)	С	
Enclosure - Acoustic	С	
Enclosure - Baffles, Gas/Vibration	E	
Enclosure - FBAC/FBHE	E	
Enclosure - Front/Rear Framing	E	
Enclosure - Furnace Bottom Encl	E	
Enclosure - Rear Arch Framing	E	
Enclosure – Roof (flat or corrugated steel)	E	
Enclosure - Vertical Roof Framing	E	
Fan (w/ or w/o motors)		
Fan - Cooling (w/motor)	В	C - Without Motor
Fan - Elevator (w/motor)	В	C - Without Motor
Fan - Igniter (w/motor)	В	C - Without Motor
Fan - Scanner (w/motor)	В	C - Without Motor
Fan - SCR (w/motor)	В	C - Without Motor
Fan - Ventilating (w/motor)	В	C - Without Motor
Fan - Fluidizing Air	В	C - Without Motor
Fan - Forced Draft	В	C - Without Motor
Fan - Gas Recirculation	В	C - Without Motor
Fan - Induced Draft	В	C - Without Motor
Fan - Primary Air	B	C - Without Motor

Component Description	Storage Type	Remarks
Fan - Secondary Air	В	C - Without Motor
Fan - Casing, Housing, Silencer	E	Silencer = C, or E if covered and vented for air circulation
Fan - Anchors	В	
Fan - Pedestals, Rotors, Shaft, Sole Plate, Wheel, I/O Dampers (w/o electric)	С	
Fan - Bearings, Coupling, Gears, Instruments, I/O Dampers (w/electric)	В	
FF - Fuel Firing Equipment		
FF – Burners, Duct/Gas/Oil	В	
FF - Feeders (Grav. or Volumetric)	C	
FF - Fuel Pipe Elbows (w/ or w/o ceramic)	E	
FF – Gas Guns	В	
FF - Oil Guns	В	
FF - Orifice Plates	С	
FF – Pipe Elbows - Ceramic	E	
FF – Pipe Fittings (clamps, coupling)	С	
FF - Piping - Gas /Oil	E	
FF - Piping - Coal (w/ or w/o ceramic)	E	
FF - Startup Burner	С	
FF - Vibrators	C	
FF – Windbox	E	Covered and vented for air circulation
Gages		
Gage – Pressure, Process	А	
Gage - Water & Water Level Indicator	A	
Hangers & Supports		
langer - Rods	C	With Donso Tano on threads and nuts
langer - Clevises	<u>с</u> с	With Denso Tape on threads and nuts
langer - Spring Assemblies	C	
langer - Supports (beams/brackets)	c	
langer - Washer Plates	C	
langer - Furnace Bottom Supports	č	
loist & Trolley – All	В	
nstrument & Switches		
nstrument - Analyzers (CO, NOx, Ox, SOx)	А	
nstrument - Connections, Conduit, Fittings	А	

Component Description	Storage Type	Remarks
Instrument - Control Cabinets	A	
Instrument - Flow Elements	В	A – with transmitters
Instrument - Inserts	В	
Instrument - Junction Boxes	В	
Instrument - Rack	А	
Instrument - Scanners	A	
Instrument - Silo Load Cells	A	
Instrument - Special Cables /Hardware	В	
Instrument - Thermocouples	A	
/Thermometer		
Instrument - Transmitters	A	
Instrument - Vibration Monitoring System	A	
Switches - Flow, Limit, Process, Other	A	
Igniter		
Igniter - Control Cards	A	
Igniter - Gas / Oil	С	
Igniter – High Energy Arc (HEA)	В	
Insulation & Lagging - All	С	See Std 34-64, Index # 6.21, for care of aluminum products.
Lubrication		
Lubrication - Pump/Skid/Tanks	С	
Lubrication - Pipe/Fittings	C	
Lubrication - Fluids/Grease/Oil	В	
Misc. – Miscellaneous		
Misc Air Cannon	В	
	<u></u> В	
Misc Ammonia Injection Grid	C	
Misc Ammonia Injection Skid Misc Boiler Name Plate	C	
Misc Boller Name Plate Misc Coatings - Protective, Paint, other	B	
Misc Fire Protection System	C	
Misc Flex Hoses / Hoses	B	
Misc Flexible Seals - Coal Silo	С	
Misc Inert Injection System	С	
Misc Mechanical Filter - Seal Air	С	
Misc Nitrogen Inerting System / Tanks	С	
Misc Parts Shipped in Cardboard Boxes	C/B/A	 Excluding electronic or electrical components which shall be stored in Type "A" or "B" respectively.
Misc Roofing & Siding	E	C, If aluminum. Also see Std 34-64, Index # 6.21
Misc Safety Valve Silencers	С	

Component Description	Storage Type	Remarks
Misc Screw Conveyor	С	
Misc Seal Weld Removal Tool	С	
Misc Selective Catalytic Reduction Modules (Catalyst)	A	
Misc Sorbent Injection System	С	
Misc. – Spares	C	Or, same as the components (that the spares are for) if better than C.
Misc Special Tools	С	A or B as applicable if instruments or electric
Misc Television Camera / Monitors	В	
Misc Vacuum System	E	Except vacuum pump & drive = B
Misc Weld Rod/Wire	С	
Motors – All	В	Refer to paragraph 11.2
	<u> </u>	Preserve pointingroup r rite
Piping (Large & Small)		
Pipe – Air	E	
Pipe - Ammonia	D	
Pipe – Blow-off	D	
Pipe - Drain	D	
Pipe – Gas	D	
Pipe - High Pressure (MS, RH, FW, Bypass)	D	
Pipe - Seal Air	E	
Pipe - Steam (HP, LP, Bypass, Inerting)	D	
Pipe - Thermocouple Protection	С	Applies to all electrical wiring conduit.
Pipe – Trim	D	
Pipe – Vent	D	
Pipe - Water (HP, LP, Recirculating, Spray)	D	
PP- Pressure Parts		
PP - Assemblies	D	Shop applied Cortec Powder on internal surfaces.
PP - Bifurcates	D	Shop applied Cortec Powder on internal surfaces.
PP - Blow Down Tanks	D	Shop applied Cortec Powder on internal surfaces.
PP - Cable Openings & Caps	С	
PP - Clamps	С	
PP - Connecting Pipes	D	Shop applied Cortec Powder on internal surfaces.
PP - Desuperheaters	D	Shop applied Cortec Powder on internal surfaces.
PP - Discharge Lines	D	Shop applied Cortec Powder on internal

Component Description	Storage Type	Remarks
		surfaces.
PP - Downcomers, Suction Manifold	D	Shop applied Cortec Powder on internal surfaces.
PP – Drum	D	Heated or shop applied Cortec Powder on internal surfaces.
PP - Drum Hanger Rod	С	With Denso Tape on threads and nuts
PP - Drum Internals Shipped separately (Dryers, Turbo Separators)	С	
PP - Element Supports and Seals	E	
PP - Field Welded Attachments	С	
PP - Headers	D	Shop applied Cortec Powder on internal surfaces.
PP - Leads, Lines and Links	D	Shop applied Cortec Powder on internal surfaces.
PP - Manifold	D	Shop applied Cortec Powder on internal surfaces.
PP - Misc. Parts (loose)	С	
PP - Modules	D	Shop applied Cortec Powder on internal surfaces.
PP - Orifices & Clamps	С	
PP - Panel with Burner / Windbox Attached	D	Under cover with good ventilation and Cortec Powder.
PP - Panels, Fin and Fusion Welded	D	Shop applied Cortec Powder on internal surfaces.
PP - Panel Inserts	D	Shop applied Cortec Powder on internal surfaces.
PP - Risers	D	Shop applied Cortec Powder on internal surfaces.
PP - Separator & Storage tank	D	Shop applied Cortec Powder on internal surfaces.
PP - Spare Tubing	D	Shop applied Cortec Powder on internal surfaces.
PP - Sphere	D	Shop applied Cortec Powder on internal surfaces.
PP - Spools	D	Shop applied Cortec Powder on internal surfaces.
PP – Tanks	D	Shop applied Cortec Powder on internal surfaces.
PP - Tubes (Crossover, Hanger, Loose, Terminal, Screen, Spacer, Supply, Vent)	D	Shop applied Cortec Powder on internal surfaces.
PP - Vessels	D	Shop applied Cortec Powder on internal surfaces.
PP - Water Cooled Access Doors	D	Shop applied Cortec Powder on internal surfaces.
PP - Weld Rings	С	

Component Description	Storage Type	Remarks
Pulv - Pulverizer / Solid Fuel Crusher		For detail listing, see Standard No. 19-95, Index 11.6.
Pulv - 110" Mill Gear Reducers	С	
Pulv - Dynamic Classifier Assy (w/o motor)	E	Covered and vented for air circulation.
Pulv - Exhauster Fans	C	
Pulv - Hydraulic Tubing	С	
Pulv - Journal Assembly	С	
Pulv - Journal Hydraulic Assembly	B	
Pulv - Machined Parts	B	
Pulv - Misc. Components	C	
Pulv - Oil Pipe	С	
Pulv - Planetary Gear Reducers	С	
Pulv - Pyrites Hoppers	С	
Pulv - Separator Bodies and Tops,	E	
Pulv - Sides,	E	
Pulv - Valves	B	
Pulv - Hydraulic Power Unit	В	
Pumps		
Pumps – Pumps with Motors	В	Refer to paragraph 11.2
Pumps – Pumps without Motors	С	
Pumps - Sump Pump	С	
Refractory		
Refractory - Brick	С	
Refractory - Castable	A	Max shelf life of castables is 6 to 12 months from date of manufacture. Castable refractory can not be stored beyond self life.
SB – SootBlower	A	
SB - Air Heater	A	
SB - Control Panel	A	
SB - Electrical Accessories	B	
SB - Retractable Blowers	B	
SB - Temperature Probe	B	-
SB - Wall Blowers	B	
SB - Wall Boxes	B	
SB - Water Cannon, Lances & Pump	B	
SS - Structural Steel		
SS - Anchor Bolts/Nuts	E	
SS - Base Plates	E	

Component Description	Storage Type	Remarks
SS - Checkered Plate	E	
SS - Columns, Beams, Girders, Bracing	E	
SS - Decking -Concrete Deck Pan-Misc.	E	
SS - Double Channel Assemblies	E	
SS - Fasteners, Bolts, Nuts, Washers,	С	
Fittings		
SS - Framing – Main/Roof	Е	
SS - Girts, Purlins, Sag Rods	Е	
SS - Grating	E	
SS - Gusset & Connecting Plates	E	
SS - Handrail	E	
SS - Ladders	E	
SS - Monorails	E	
SS - Platforms	E	
SS - Silos & Silo Caps	E	
SS - Sootblower Supports	С	
SS - Stairs	E	
SS - Tanks, Bins, Bunkers	E	
SS - Toe Plate	E	
SSC - Submerged Scraper Conveyor		
SSC - Bolts, Fittings, Misc.	С	
SSC - Control Cabinet	В	
SSC - Drive	В	
SSC - Structural Housing	E	
Valve		
Valve - Butterfly	В	
Valve - By-pass	В	
Valve - Check	В	
Valve - Control	В	
Valve - Isolation (Block, Gate, Stop)	В	
Valve - Manual	В	
Valve - Power Control (ERV)	В	
Valve - Safety	В	
Valve - Spare Parts	В	
Valve - Steam Traps, Strainers	В	
Vent		
Vent - Dust Collection/Filter	С	
Vent - Louvres	С	
Vent - Piping	D	
Vent - Silencers	С	

Systems and major components not listed above (i.e. Baghouse, Precipitator etc.) may be stored on a component basis consistent with the above requirements.