# **Unit 1 Specifications and Systems List**

### **Systems**

APB AC Power Supply (120/208 Volts) APC AC Power Supply (480 Volts) APD AC Power Supply (4160 Volts) **AQCS** Reserve Power Supply APF

DC Power Supply APH

API Uninterruptible Power Supply

ASB Fly Ash

**Buildings and Enclosures** BSA **AOCS** Compressed Air CAB CCB Pulse Jet Fabric Filter

CCE **Induced Draft** 

CCF Selective Catalytic Reduction

CCH Sorbent Injection

Powder Activated Carbon Injection CCH

CGE **Ammonia Supply CMA** Communication

Control and Monitoring COA

EEA Freeze Protection

Grounding **EEB** Fire Protection FPA

LTA Lighting

Neural Network SGM

STA Site

WSC **AQCS Service Water** 

#### **Specifications**

#### **Civil / Structural Purchase Contracts:**

61.0800	Concrete
61.0915	Metal Wall and Roof Panel Systems
61.1808	Precast Concrete Manholes
61.3801	Ductwork and Breeching
61.4001	Structural Steel
61 4006	Metal Roof Deck and Concrete Deck Form

#### **Architectural Purchase Contracts:**

62.0942	<b>Building Insulation</b>
62.3200	<b>Building HVAC</b>

62.0800 Fire Protection Equipment

#### **Electrical Purchase Contracts:**

63.0000	Electrical Equipment & Materials
63.0501	Lightning Protection Equipment and Materials
63.0601	Plant Communication System



63.0604	Plant Security System
63.0700	Cathodic Protection
63.0801	Medium Voltage Power Cable
63.0824	Cable - 600V Control - Non-Class 1E
63.0840	Cable - 300-600V Instrument & T/C - Non-Class 1E
63.1201	Iso-Phase Bus Duct
63.1206	Cable Bus
63.2000	Metering & Relaying
63.2001	Protective Relay Panels
63.2600	Raceway - General
63.2601	Raceway - Duct Bank Materials
63.2605	Wireways
63.2610	Raceway - Cable Tray
63.2800	UPS System
63.2801	Batteries - DC Equipment
63.2805	Panel Boards
63.2806	125V DC Distribution Panel
63.3000	Motor Control Centers Equipment
63.3002	Variable Frequency Drives
63.3600	Switchgear and Motor Control Assemblies
63.3601	Medium Voltage Switchgear
63.3602	Medium Voltage Controllers
63.3802	Aux Transformer
63.5001	Lighting
63.5002	Junction Boxes
63.5030	Welding System
63.5500	Grounding Materials and Equipment
63.6210	Disconnect Switches
Control Purc	chase Contracts:
64.0202	DCS / PLC mods
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64.0202	DCS / PLC mods
64.0203	Misc Control Loop System
64.0404	Vibration Monitoring
64.0407	Neural Networks
64.0602	Primary Flow elements
64.0607	Sight Flow Indicators
64.0613	Flow Meters
64.0801	Transmitters - Level
64.0805	Switches - Level
64.1001	Transmitters - Pressure
64.1002	Indicators - Pressure
64.1202	Indicators - Temperature
64.1203	Thermocouple Assemblies & TWS
64.1601	Control Cabinets & Control Panels
64.1602	Instr. Racks and Enclosures
64.5010	Tubing

64.5050 Instrument Stands

#### **Environmental Chemical Purchase Contracts:**

65.1113	Ammonia Supply/Storage
65.3230	SO3 Removal System (Sorbent Injection)
65.3120	Pulse Jet Fabric Filter
65.3310	NOx Reduction System
65.3311	NOx Catalyst
65.3500	PAC Mercury Control
65.3600	Continuous Emissions Monitoring (CEM)
65.4100	Safety Showers

#### **Mechanical Materials Purchase Contracts:**

66.1000	Pipe and Piping Accessories
66.2070	Pipe Supports (Purchaser Designed)
66.3000	Valves

### **Mechanical Equipment Purchase Contracts:**

67.0400	Fly Ash Handling
67.5300	Shop Fabricated Tanks
67.9532	Induced Draft Fans

#### **Civil / Structural Construction Contracts:**

71.0402	General Construction - Substructures
71.0403	General Construction - Superstructures

#### **Architectural Construction Contracts:**

72.0600 Field Applied Protective Coatings

#### **Electrical / Control Construction Contracts:**

73.0201	Electrical Equipment Erection
73.0205	Iso-Phase Bus Duct Installation
73.0900	Freeze Protection

#### **Control and Instrumentation Construction Contracts:**

74.0200 Control & Instrumentation Installation

#### **Mechanical Materials Construction Contracts:**

76.1000 Plant Piping Installation

#### **Mechanical Equipment Construction Contracts:**

77.0000	Mechanical Equipment Erection
77.5450	Field Erected Tanks

# **Unit 2 Specifications and Systems List**

# **Systems**

APB	AC Power Supply (120/208 Volts)
APC	AC Power Supply (480 Volts)
APD	AC Power Supply (4160 Volts)
APF	<b>AQCS</b> Reserve Power Supply

APH DC Power Supply

API Uninterruptible Power Supply

ASB Fly Ash

BSA Buildings and Enclosures
CAB AQCS Compressed Air
CCB Pulse Jet Fabric Filter

CCE Induced Draft

CCF Selective Catalytic Reduction

CCH Sorbent Injection

CCH Powder Activated Carbon Injection

CGE Ammonia Supply CMA Communication

COA Control and Monitoring

EEA Freeze Protection

EEB Grounding
FPA Fire Protection

LTA Lighting

PPF Overhead Transmission Line

SGM Neural Network

STA Site

WSC AQCS Service Water

# **Specifications**

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#### **Civil / Structural Purchase Contracts:**

01.0800	Concrete
61.0915	Metal Wall and Roof Panel Systems
61.3801	Ductwork and Breeching
61.4001	Structural Steel
61.4006	Metal Roof Deck
61.4200	Power Transmission Structures and Accessories

#### **Architectural Purchase Contracts:**

62.0942	<b>Building Insulation</b>
62.3200	Building HVAC

62.0800 Fire Protection Equipment

	rchase Contracts:	
63.0000	Electrical Equipment & Materials	
63.0501	Lightning Protection Equipment and Materials	
63.0601	Plant Communication System	
63.0604	Plant Security System	
63.0700	Cathodic Protection	
63.0801	Medium Voltage Power Cable	
63.0824	Cable - 600V Control - Non-Class 1E	
63.0840	Cable - 300-600V Instrument & T/C - Non-Class 1E	
63.1201	Iso-Phase Bus Duct	
63.1206	Cable Bus	
63.2000	Metering & Relaying	
63.2001	Protective Relay Panels	
63.2600	Raceway - General	
63.2601	Raceway - Duct Bank Materials	
63.2605	Wireways	
63.2610	Raceway - Cable Tray	
63.2800	UPS System	
63.2801	Batteries - DC Equipment	
63.2805	Panel Boards	
63.2806	125V DC Distribution Panel	
63.3000	Motor Control Centers Equipment	
63.3002	Variable Frequency Drives	
63.3600	Switchgear and Motor Control Assemblies	
63.3601	Medium Voltage Switchgear	
63.3602	Medium Voltage Controllers	
63.3802	Aux Transformer	
63.5001	Lighting	
63.5002	Junction Boxes	
63.5030	Welding System	
63.5500	Grounding Materials and Equipment	
63.6210	Disconnect Switches	
63.7400	Overhead Transmission Package	
Control Pura	chase Contracts:	
64.0202	DCS / PLC mods	
64.0202	Misc Control Loop System	
04.0203	What control Loop System	

04.0202	DCS / I LC IIIous
64.0203	Misc Control Loop System
64.0404	Vibration Monitoring
64.0407	Neural Networks
64.0602	Primary Flow elements
64.0607	Sight Flow Indicators
64.0613	Flow Meters
64.0801	Transmitters - Level
64.0805	Switches - Level
64.1001	Transmitters - Pressure



64.1002	Indicators - Pressure
64.1202	Indicators - Temperature
64.1203	Thermocouple Assemblies & TWS
64.1601	Control Cabinets & Control Panels
64.1602	Instr. Racks and Enclosures
64.5010	Tubing
64.5050	Instrument Stands

# **Environmental Chemical Purchase Contracts:** 65.1113 Ammonia Supply/Storage

65.1113	Ammonia Supply/Storage
65.3230	SO3 Removal System (Sorbent Injection)
65.3120	Pulse Jet Fabric Filter
65.3310	NOx Reduction System
65.3311	NOx Catalyst
65.3500	PAC Mercury Control
65.3600	Continuous Emissions Monitoring (CEM)
65.4100	Safety Showers

#### **Mechanical Materials Purchase Contracts:**

66.1000	Pipe and Piping Accessories
66.2070	Pipe Supports (Purchaser Designed)
66.3000	Valves

#### **Mechanical Equipment Purchase Contracts:**

67.0400	Fly Ash Handling
67.5300	Shop Fabricated Tanks
67.9532	Induced Draft Fans

#### **Civil / Structural Construction Contracts:**

71.0100	Demolition Works
71.0201	Sitework
71.0402	General Construction - Substructures
71.0403	General Construction - Superstructures

#### **Architectural Construction Contracts:**

72.0600 Field Applied Protective Coatings

### **Electrical / Control Construction Contracts:**

73.0201	Electrical Equipment Erection
73.0205	Iso-Phase Bus Duct Installation
73 0900	Freeze Protection

#### **Control and Instrumentation Construction Contracts:**

74.0200 Control & Instrumentation Installation

# **Mechanical Materials Construction Contracts:**

76.1000 Plant Piping Installation

# **Mechanical Equipment Construction Contracts:**

77.0000 Mechanical Equipment Erection

77.5450 Field Erected Tanks

# **Unit 3 Specifications and Systems List**

# **Systems**

APB	AC Power Supply (120/208 Volts)
APC	AC Power Supply (480 Volts)
APD	AC Power Supply (4160 Volts)
APF	AQCS Reserve Power Supply

APH DC Power Supply

API Uninterruptible Power Supply

ASB Fly Ash

BSA **Buildings and Enclosures AQCS** Compressed Air CAB CCB Pulse Jet Fabric Filter

CCE **Induced Draft** CCH Sorbent Injection

CCH Powder Activated Carbon Injection

CMA Communication

Control and Monitoring COA

EEA Freeze Protection

Grounding EEB FPA Fire Protection LTA Lighting

Neural Network SGM

STA Site

WSC **AQCS Service Water** 

# **Specifications**

# **Civil / Structural Purchase Contracts:**

61.0800	Concrete
61.3801	Ductwork and Breeching
61.4001	Structural Steel

61.4006 Metal Roof Deck and Concrete Deck Form

#### **Architectural Purchase Contracts:**

62.0942	Building Insulation
62.3200	Building HVAC
62.0800	Fire Protection Equipment

#### **Electrical Purchase Contracts:**

63.0000	Electrical Equipment & Materials
63.0501	Lightning Protection Equipment and Materials
63.0601	Plant Communication System
63.0604	Plant Security System
63.0700	Cathodic Protection
63.0801	Medium Voltage Power Cable
63.0824	Cable - 600V Control - Non-Class 1E

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63.0840	Cable - 300-600V Instrument & T/C - Non-Class 1E
63.1203	Generator Breaker
63.1206	Cable Bus
63.2000	Metering & Relaying
63.2001	Protective Relay Panels
63.2600	Raceway - General
63.2601	Raceway - Duct Bank Materials
63.2605	Wireways
63.2610	Raceway - Cable Tray
63.2800	UPS System
63.2801	Batteries - DC Equipment
63.2805	Panel Boards
63.2806	125V DC Distribution Panel
63.3000	Motor Control Centers Equipment
63.3002	Variable Frequency Drives
63.3600	Switchgear and Motor Control Assemblies
63.3601	Medium Voltage Switchgear
63.3602	Medium Voltage Controllers
63.3802	Aux Transformer
63.5001	Lighting
63.5002	Junction Boxes
63.5030	Welding System
63.5500	Grounding Materials and Equipment
63.6210	Disconnect Switches

# **Control Purchase Contracts:**

64.0202	DCS / PLC mods
64.0203	Misc Control Loop System
64.0404	Vibration Monitoring
64.0407	Neural Networks
64.0602	Primary Flow elements
64.0607	Sight Flow Indicators
64.0613	Flow Meters
64.0801	Transmitters - Level
64.0805	Switches - Level
64.1001	Transmitters - Pressure
64.1002	Indicators - Pressure
64.1202	Indicators - Temperature
64.1203	Thermocouple Assemblies & TWS
64.1601	Control Cabinets & Control Panels
64.1602	Instr. Racks and Enclosures
64.5010	Tubing
64.5050	Instrument Stands

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#### **Environmental Chemical Purchase Contracts:**

65.3230	SO3 Removal System (Sorbent Injection)
65.3120	Pulse Jet Fabric Filter
65.3500	PAC Mercury Control
65.3600	Continuous Emissions Monitoring (CEM)
65.4100	Safety Showers

#### **Mechanical Materials Purchase Contracts:**

66.1000	Pipe and Piping Accessories
66.2070	Pipe Supports (Purchaser Designed)
66.3000	Valves

# **Mechanical Equipment Purchase Contracts:**

67.0400	Fly Ash Handling
67.5300	Shop Fabricated Tanks
67.9532	Booster Fans

#### **Civil / Structural Construction Contracts:**

71.0100	Demolition Works
71.0402	General Construction - Substructures
71.0403	General Construction - Superstructures

#### **Architectural Construction Contracts:**

72.0600 Field Applied Protective Coatings

#### **Electrical / Control Construction Contracts:**

73.0201	Electrical Equipment Erection
73.0205	Iso-Phase Bus Duct Installation
73.0900	Freeze Protection

#### **Control and Instrumentation Construction Contracts:**

74.0200 Control & Instrumentation Installation

#### **Mechanical Materials Construction Contracts:**

76.1000 Plant Piping Installation

#### **Mechanical Equipment Construction Contracts:**

77.0000	Mechanical Equipment Erection
77 5450	Field Frected Tanks

# **Unit 4 Specifications and Systems List**

**Systems** 

APB AC Power Supply (120/208 Volts) APC AC Power Supply (480 Volts) APD AC Power Supply (4160 Volts) APF **AQCS** Reserve Power Supply

DC Power Supply APH

API Uninterruptible Power Supply

ASB Fly Ash

ASE FGD Byproduct Dewatering (Interface with Existing) **BMC** FGD Reagent Preparation (Interface with Existing)

**Buildings and Enclosures** BSA CAB **AQCS** Compressed Air

CCA Chimney

CCB Pulse Jet Fabric Filter CCC Flue Gas Desulfurization

CCE Induced Draft

CCH Powder Activated Carbon Injection

CCH Sorbent Injection Communication **CMA** 

Control and Monitoring COA

EEA Freeze Protection

Grounding **EEB** FPA Fire Protection

LTA Lighting

PPF Overhead Transmission Line

SAA Continuous Emission Monitoring System

**SGM Neural Network** 

STA Site

WSC **AQCS Service Water** WSG WFGD Makeup Water

WWC Wastewater

# **Specifications**

61.0800

61.4200

#### **Civil / Structural Purchase Contracts:** Concrete

61.1000	Exhaust Chimney (F&E)
61.1808	Precast Concrete Manholes
61.3801	Ductwork and Breeching
61.4001	Structural Steel
61.4006	Metal Roof Deck and Concrete Deck Form

Power Transmission Structures and Accessories

<b>Architectural Purchase Contracts:</b>		
62.0213	Pre-Engineered Metal Building (F&E)	
62.0942	Building Insulation	
62.3200	Building HVAC	
62.0800	Fire Protection Equipment	

#### **Electrical Purchase Contracts:**

Electrical I di chase Contracts.		
63.0000	Electrical Equipment & Materials	
63.0501	Lightning Protection Equipment and Materials	
63.0601	Plant Communication System	
63.0604	Plant Security System	
63.0700	Cathodic Protection	
63.0801	Medium Voltage Power Cable	
63.0824	Cable - 600V Control - Non-Class 1E	
63.0840	Cable - 300-600V Instrument & T/C - Non-Class 1E	
63.1203	Generator Breaker	
63.1206	Cable Bus	
63.2000	Metering & Relaying	
63.2001	Protective Relay Panels	
63.2600	Raceway - General	
63.2601	Raceway - Duct Bank Materials	
63.2605	Wireways	
63.2610	Raceway - Cable Tray	
63.2800	UPS System	
63.2801	Batteries - DC Equipment	
63.2805	Panel Boards	
63.2806	125V DC Distribution Panel	
63.3000	Motor Control Centers Equipment	
63.3002	Variable Frequency Drives	
63.3600	Switchgear and Motor Control Assemblies	
63.3601	Medium Voltage Switchgear	
63.3602	Medium Voltage Controllers	
63.3802	Aux Transformer	
63.5001	Lighting	
63.5002	Junction Boxes	
63.5030	Welding System	
63.5500	Grounding Materials and Equipment	
63.6210	Disconnect Switches	
63.7400	Overhead Transmission Package	

#### **Control Purchase Contracts:**

64.0202	DCS / PLC mods
64.0203	Misc Control Loop System
64.0404	Vibration Monitoring
64.0407	Neural Networks
64.0602	Primary Flow elements



64.0607	Sight Flow Indicators
64.0613	Flow Meters
64.0801	Transmitters - Level
64.0805	Switches - Level
64.1001	Transmitters - Pressure
64.1002	Indicators - Pressure
64.1202	Indicators - Temperature
64.1203	Thermocouple Assemblies & TWS
64.1601	Control Cabinets & Control Panels
64.1602	Instr. Racks and Enclosures
64.5010	Tubing
64.5050	Instrument Stands

#### **Environmental Chemical Purchase Contracts:**

65.1113 Ammonia Supply/Storage	
65.3230 SO3 Removal System (Sorber	nt Injection)
65.3120 Pulse Jet Fabric Filter	
65.3500 PAC Mercury Control	
65.3600 Continuous Emissions Monito	oring (CEM)
65.4100 Safety Showers	

# **Mechanical Materials Purchase Contracts:**

66.1000	Pipe and Piping Accessories
66.2070	Pipe Supports (Purchaser Designed)
66.3000	Valves

# **Mechanical Equipment Purchase Contracts:**

67.0400	Fly Ash Handling
67.5300	Shop Fabricated Tanks
67.9532	Booster Fans

# **Civil / Structural Construction Contracts:**

71.0100	Demolition Works
71.0402	General Construction - Substructures
71.0403	General Construction - Superstructures

#### **Architectural Construction Contracts:**

72.0600	Field Applied Protective Coatings
72.0900	Building Finishes

#### **Electrical / Control Construction Contracts:**

73.0201	Electrical Equipment Erection
73.0205	Iso-Phase Bus Duct Installation
73.0900	Freeze Protection



#### **Control and Instrumentation Construction Contracts:**

74.0200 Control & Instrumentation Installation

# **Mechanical Materials Construction Contracts:**

76.1000 Plant Piping Installation

# **Mechanical Equipment Construction Contracts:**

77.0000 Mechanical Equipment Erection

77.5450 Field Erected Tanks

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