COMBINED OUTFALL - 148,000 GPD

148,000 GPD

OUTFALL 014

OUTFALL 001 ONCE-THROUGH COOLING WATER

769,040,000 GPD

80,000 GPD

OUTFALL 001 TO MONTICELLO RESERVOIR

768,960,000 GPD

DISCHARGE CANAL

769,188,000 GPD

691,200,000 GPD

MAIN CONDENSERS

MONTICELLO RESERVOIR

CIRCULATING WATER INTAKE

768,960,000 GPD

OTHER COOLING SERVICES

77,760,000 GPD

OUTFALL 002 SERVICE WATER

OUTFALL 002 - TO MONTICELLO RESERVOIR (DIRECTION OF FLOW VARIES WITH LAKE LEVEL)

COMPONENT COOLING HEAT EXCHANGERS

SERVICE WATER POND

SERVICE WATER INTAKE

REACTOR BLDG. COOLING UNITS

OTHER COOLING SERVICES

MOLLUSCICIDE

PLANT INTAKE WATER TREATMENT

MISC. PLANT WATER USAGES

TO OUTFALLS 003, 004, 005, 006B, 008, 009A, 009B, 012, 013 - 102,000 GPD

262,000 GPD

TO LOW VOLUME WASTE (OUTFALLS 006A & 007)

160,000 GPD

OUTFALL 003 RADIOACTIVE WASTE PROCESSING

MISC. WASTE DRAIN TANK

RECYCLE HOLDUP TANK RM. SUMP

WASTE HOLD UP TANK

WASTE EVAPORATOR

CONDENSATE DEMINERALIZER

RECYCLE TO PROCESS

RECYCLE HOLD UP TANKS

REACTOR BUILDING SUMP

LEAK DETECTION SUMP

INCORE INSTRUMENTATION SUMP

RHR PUMP ROOM SUMP "B"

AUXILIARY BUILDING SUMP

EAST PENET. ACCESS AREA SUMP

WASTE HOLDUP TANK RM. SUMP

FLOOR DRAIN TANK

WMT DEMINERALIZER

WASTE MONITOR TANK 1

DEMINERALIZER SYSTEM

OUTFALL 003

LAUNDRY & HOT SHOWERS

LAUNDRY HOT SHOWER TANK

WASTE MONITOR TANK 2

EXCESS WASTE HOLDUP TANK CUBICLE SUMP

DECON PIT COLLECTION TANK CUBICLE SUMP

EXCESS LIQUID WASTE SYSTEM AREA SUMP

DECON. PIT COLLECTION TANK

DEMINERALIZER

DEMINERALIZER

EXCESS WASTE HOLD UP TANK

20,000 GPD

OUTFALL 004 STEAM GENERATOR BLOWDOWN

STEAM GENERATOR BLOWDOWN

MONITOR

OUTFALL 004 TO MONTICELLO RESERVOIR VIA OUTFALL 001

TO MONTICELLO RESERVOIR VIA OUTFALL 006A

BLOWDOWN SYS. SUMP

BLOWDOWN HOLDUP TANK

DEMINERALIZER

RETURN TO PROCESS VIA CONDENSER 144,000 GPD

OUTFALL 003 TO PENSTOCKS OF FAIRFIELD HYDRO

MONITOR TANK

TO PENSTOCKS OF FAIRFIELD HYDRO 20,000 GPD

OUTFALL 005 SANITARY SEWAGE TREATMENT PLANT

SERVICE BUILDING
CONTROL BUILDING
FUEL HANDLING BUILDING
AUXILIARY SERVICES BUILDING
SECURITY/ENGINEERING BUILDING
NUCLEAR OPERATIONS OFFICE BUILDING
CRAFT AREA
WAREHOUSE "C"
MAINTENANCE SHOP
NUCLEAR LEARNING CENTER
BLUE BUILDING
CRAFT TRAINING BUILDING
CONSTRUCTION WAREHOUSE "A"
BECHTEL BUILDING

AERATED POND

SAND FILTERS

CHLORINE CONTACT TANK

HYPOCHLORITE

DECHLORINATION TANK

BISULFITE

OUTFALL 005 TO MONTICELLO RESERVOIR 18,000 GPD

OUTFALL 006A LOW VOLUME WASTE (ALUM SLUDGE BASIN)

CONDENSATE POLISHER BACKWASH
CLARIFIER BLOWDOWN
CARBON FILTER BACKWASH
GRAVITY FILTER BACKWASH
STEAM GENERATOR BLOWDOWN
CONDENSATE STORAGE TANK
CHEMICAL CLEANING WASTE

CLARIFIER BLOWDOWN SUMP

ALUM SLUDGE BASIN

OUTFALL 006A TO MONTICELLO RESERVOIR 80,000 GPD

TO PLANT STARTUP WASTE HOLDING BASIN (OUTFALL 008)

OUTFALL 006B LOW VOLUME WASTE (PLANT WASTE SURGE BASIN)

INTERMEDIATE BLDG. SUMPS A, B, C
TENDON ACCESS GALLERY SUMP
CONDENSATE PUMP PIT SUMP
CONDENSATE STORAGE TANK
AUXILIARY CONDENSER CLEANING PIT SUMP

TURBINE ROOM SUMP

INDUSTRIAL COOLING SYSTEM DRAIN (CLOSED SIDE)

CROM COOLING WATER DRAIN (CLOSED SIDE)

DIESEL GENERATOR UNLOADING STATION
BOILER HOUSE DRAINS
DIESEL GENERATOR BLDG. SUMP
CIRC. WATER PUMP HOUSE SUMP
OIL UNLOADING STATION
OIL TRANSFER STATION
OIL STORAGE DIKE AREA
TRANSFORMER AREA DRAINS
SAFE GUARD TRANSFORMER AREA DRAINS

MAIN CONDENSER CLEANING SUMP

OIL COLLECTING TANK

OIL SKIMMER

OIL WASTE COLLECTION SUMP

PLANT WASTE SURGE BASIN

OUTFALL 006B TO MONTICELLO RESERVOIR 50,000 GPD

TO PLANT STARTUP WASTE HOLDING BASIN (OUTFALL 008)

OUTFALL 007 LOW VOLUME WASTES (NEUTRALIZATION WASTE TANK)

OTHER PROCESS WATER
SODIUM HYDROXIDE
SULFURIC ACID
CHEM. FEED EQUIP. DR. SUMP
CAUSTIC TANK AREA SUMP
INTERMEDIATE BLDG SUMP 'D' BATTERY ROOM

ION EXCHANGE REGENERANTS

NEUTRALIZATION WASTE TANK

OUTFALL 007 TO MONTICELLO RESERVOIR VIA OUTFALL 001 80,000 GPD

OUTFALL 008 CHEMICAL CLEANING WASTE/LOW VOLUME WASTE

METAL CLEANING WASTE
LOW VOLUME WASTE FROM OIL WASTE COLLECTION SUMP

PLANT STARTUP WASTE HOLDING BASIN

OUTFALL 008 TO MONTICELLO RESERVOIR

OUTFALLS 009 A & B INDUSTRIAL AND CROM COOLERS

INDUSTRIAL COOLER OVERFLOW OUTFALL 009A
CROM COOLER OVERFLOW OUTFALL 009B
TO BROAD RIVER VIA OUTFALL 012

6,000 GPD

8,000 GPD

2,000 GPD

OUTFALL 012 NORTH YARD DRAIN SYSTEM

YARD DRAINS NORTH & WEST OF PLANT
AUXILIARY BUILDING ROOF DRAINS
CONTROL BUILDING ROOF DRAINS
RADIOLOGICAL MAINTENANCE BLDG. ROOF DRAINS
SECURITY/ENGINEERING BUILDING ROOF DRAINS
NUCLEAR OPERATIONS OFFICE BLDG. ROOF DRAINS
INTERMEDIATE BUILDING ROOF DRAINS
DIESEL GENERATOR BUILDING ROOF DRAINS
FUEL HANDLING BUILDING ROOF DRAINS
REFUELING WATER STORAGE TANK PIT DRAIN TANK
INDUSTRIAL & CROM COOLERS (OUTFALL 009A&B)
GROUNDWATER PUMPS XPP5003A & B

TO WASTE MONITOR TANK

OUTFALL 012 TO BROAD RIVER 60,000 GPD

OUTFALL 013 SOUTHEAST YARD DRAIN SYSTEM

YARD DRAINS SOUTH & EAST OF PLANT
TURBINE BUILDING ROOF DRAINS
SERVICE BUILDING ROOF DRAINS
WATER TREATMENT BUILDING ROOF DRAINS
CONDENSATE STORAGE TANK SUMP
DEMINERALIZED WATER PUMP HOUSE SUMP
FILTERED WATER STORAGE TANK SUMP
POTABLE WATER TREATMENT BLDG. DRAIN
AUXILIARY BOILER OUTSIDE DRAIN
CONSTRUCTION FIRE PUMP HOUSE DRAIN
SERVICE BUILDING OFFICE & RECORDS ROOM FLOOR DRAINS

OUTFALL 013 TO BROAD RIVER VIA MAYO CREEK

LEGEND
——— NORMAL ROUTE
– – – – ALTERNATE ROUTE

NOTE: ALL FLOWS SHOWN ARE FOR NORMAL DISCHARGE ROUTE

D-01

1/4"=1'-0" 0' 5' 10' 15' 20'

DRAWING LEGIBILITY CLASS 2
SCE&G CAD ENHANCED

SOUTH CAROLINA ELECTRIC & GAS COMPANY
VIRGIL C. SUMMER NUCLEAR STATION
BUILDING SERVICES PLUMBING
SCHEMATIC OF WATER FLOW

NO.	DATE	BY	REVISION	CKD. BY	APPROVAL
3	10/17/06	DDJ	REVISED PER ECR-50474	RHM	DKW
2	12/14/01	JTS	REVISED PER ECR-70015	MGR	CC
1	12/1/98	RHM	REVISED PER ECR-50019	MGR	JEG
0	10/18/95	AVN	ISSUED PER MRF-22385	MGR	AJC

SCE&G A SCANA COMPANY — DESIGN ENGINEERING — V. C. SUMMER NUCLEAR STATION JENKINSVILLE, S. C.

MADE: A.V.N. | CHECKED: M.G.R. | LE APPROVAL: A.J.C.

SCALE: NO SCALE | D-921-931 | 3 | DRAWING NUMBER | SHT. NUMBER | REV