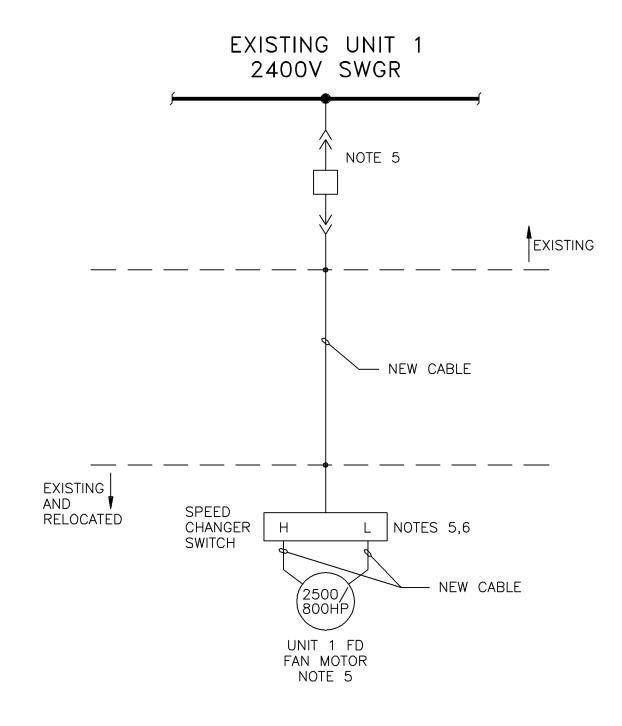
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- ALL EQUIPMENT RATINGS/QUANTITIES ARE PRELIMINARY AND SHALL BE DETERMINED DURING DETAILED DESIGN.
- 2. THE NUMBER, SIZE AND NAMES OF INDIVIDUAL LOADS CONNECTED TO SWITCHGEAR AND MOTOR CONTROL CENTERS (MCCs) INCLUDING REQUIREMENTS FOR SPARES WILL BE DETERMINED DURING DETAILED DESIGN.
- 3. ALL CONDUCTORS ARE CABLE UNLESS NOTED OTHERWISE.
- 4. AN ETAP SHORT CIRCUIT AND LOAD FLOW STUDY WILL BE REQUIRED DURING DETAIL DESIGN.
- 5. THE EXISTING UNIT 2 ID FAN MOTOR WILL BE USED TO DRIVE THE NEW UNIT 1 FD FAN. THE EXISTING MOTOR & SPEED SWITCH WILL BE REMOVED FROM THEIR PRESENT LOCATION, AND LOCATED AT THE NEW FD FAN. THE EXISTING CABLE BETWEEN THE EXISTING 2400V SWITCHGEAR AND THE SPEED CHANGER SWITCH WILL BE ABANDONED IN PLACE OR REMOVED. THE SOURCE FOR THE UNIT 1 FD FAN WILL BE THE EXISTING UNIT 1 2400V SWITCHGEAR.
- 6. NEW FD FAN SIZED FOR A MAXIMUM POWER CONSUMPTION OF 1000HP. THE 2500HP MOTOR WOULD PROVIDE 1000HP TO THE FAN SHAFT.



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BLACK & VEATCH
PHASE II: AIR QUALITY CONTROL STUDY

ONE-LINE DIAGRAM
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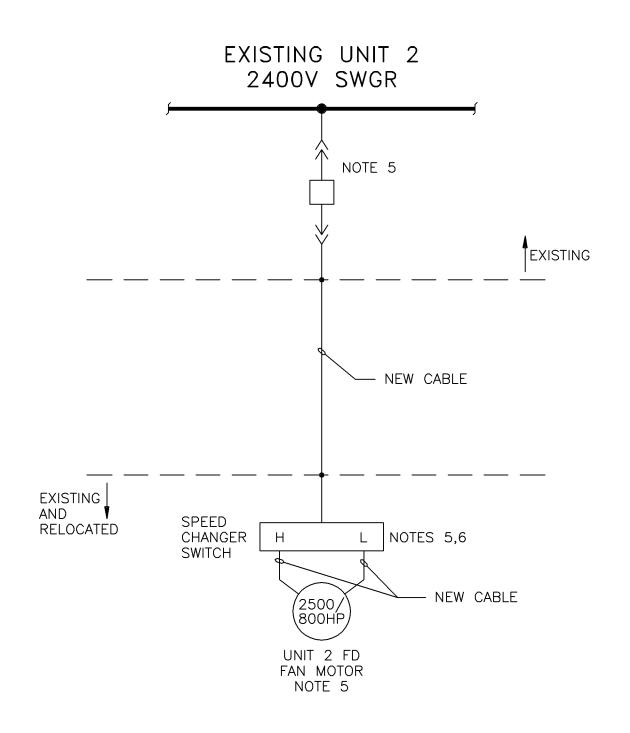
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- 2. THE NUMBER, SIZE AND NAMES OF INDIVIDUAL LOADS CONNECTED TO SWITCHGEAR AND MOTOR CONTROL CENTERS (MCCs) INCLUDING REQUIREMENTS FOR SPARES WILL BE
- 3. ALL CONDUCTORS ARE CABLE UNLESS NOTED OTHERWISE.
- 4. AN ETAP SHORT CIRCUIT AND LOAD FLOW STUDY WILL BE REQUIRED DURING DETAIL DESIGN.

DETERMINED DURING DETAILED DESIGN.

- 5. THE EXISTING UNIT 2 ID FAN MOTOR WILL BE USED TO DRIVE THE NEW UNIT 2 FD FAN. THE EXISTING MOTOR & SPEED SWITCH WILL BE REMOVED FROM THEIR PRESENT LOCATION, AND LOCATED AT THE NEW FD FAN. THE EXISTING CABLE BETWEEN THE EXISTING 2400V SWITCHGEAR AND THE SPEED CHANGER SWITCH WILL BE ABANDONED IN PLACE OR REMOVED. THE SOURCE FOR THE UNIT 2 FD FAN WILL BE THE EXISTING UNIT 2 2400V SWITCHGEAR.
- 6. NEW FD FAN SIZED FOR A MAXIMUM POWER CONSUMPTION OF 1500HP. THE 2500HP MOTOR WOULD PROVIDE 1000HP TO THE FAN SHAFT.

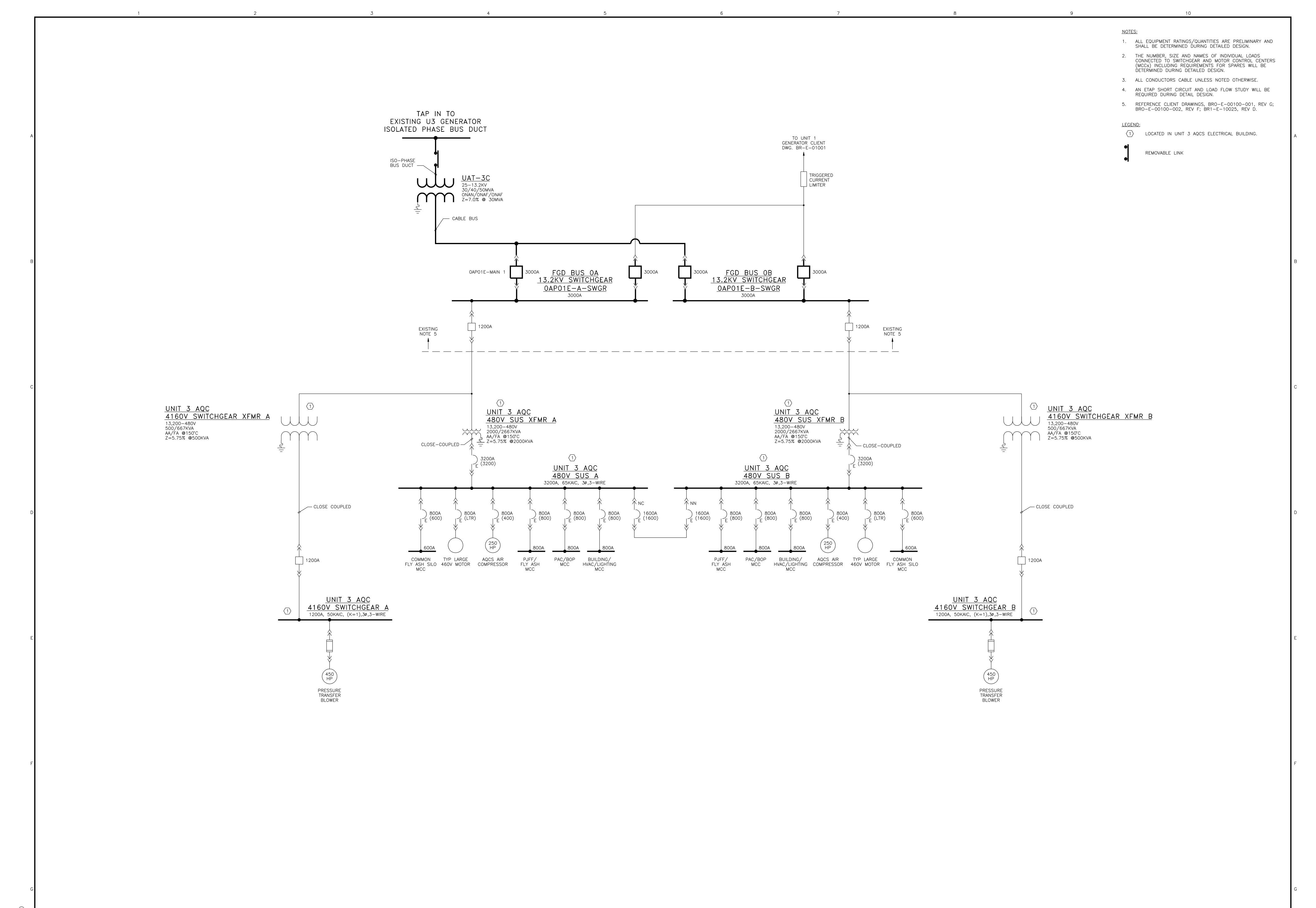


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BLACK & VEATCH PHASE II: AIR QUALITY CONTROL STUDY 168908—B2DE—E1002

| ENGINEER | JDC | DRAWN | JEB | CONCEPTUAL OVERALL — UNIT 2 AQCS | AREA | PROJECT | DRAWING NUMBER | 168908—B2DE—E1002

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2. THE NUMBER, SIZE AND NAMES OF INDIVIDUAL LOADS CONNECTED TO SWITCHGEAR AND MOTOR CONTROL CENTERS (MCCs) INCLUDING REQUIREMENTS FOR SPARES WILL BE DETERMINED DURING DETAILED DESIGN. 3. ALL CONDUCTORS ARE CABLE UNLESS NOTED OTHERWISE. 4. AN ETAP SHORT CIRCUIT AND LOAD FLOW STUDY WILL BE REQUIRED DURING DETAILED DESIGN. 5. SEE CLIENT DRAWING BRO-E-00100-001, REV 4. THERE IS A SPARE 1200A 13.2KV BREAKER AT POSITION A7 ON FGD BUS OA, OAPO1E-A-SWGR. THE BREAKER IN POSITION A7 WILL PROVIDE THE RESERVE POWER FEED TO THE NEW UNIT 1/2COMMON SWITCHGEAR. 1 LOCATED IN UNIT 1/2 AQCS ELECTRICAL BUILDING TAP IN TO REMOVABLE LINK EXISTING U3 GENERATOR ISOLATED PHASE BUS DUCT ISO-PHASE 13.2KV BUS DUCT — UNIT 1/2 COMMON AQC EXISTING 13.2KV FGD SWGR BUS A MAIN AUXILIARY XFMR UAT-3D NOTE 5 25-13.2KV 15/20/25MVA ONAN/ONAF/ONAF Z=LTR @ 15MVA / 1200A CABLE BUS 600A CABLE BUS — 600A CABLE BUS — 600A CABLE BUS <u>UNIT 1/2</u> <u>UNIT 1/2</u> 1200A COMMON AQC COMMON AQC 13.2KV SWITCHGEAR A 13.2KV SWITCHGEAR B 1200A, 50KAIC (K=1),3ø,3-WIRE 1200A, 50KAIC (K=1),3ø,3-WIRE 1200A 1200A 1200A 360A 二 360A $\langle 1 \rangle$ $\langle 1 \rangle$ UNIT 1 AQC UNIT 1 AQC UNIT 2 ID FAN TYP 480V SUS XFMR A 480V SUS XFMR B 13.2KV MOTOR 13.2KV MOTOR 13.2KV-480V 2000/2667KVA 13.2KV-480V 2000/2667KVA AA/FA @150°C Z=5.75% @2000KVA AA/FÁ @150°C 互 Z=5.75% @2000KVA CLOSE-COUPLED -CLOSE-COUPLED 수 (3200) UNIT 1/2 AQC (1)
480V SUS B UNIT 1/2 AQC 480V SUS A 3200A, 65KAIC, 3ø,3-WIRE 3200A, 65KAIC, 3ø,3-WIRE UNIT 1/2 COMMON AQC UNIT 1/2 COMMON AQC 4160V SWITCHGEAR 4160V SWITCHGEAR 2000A (2000) 800A (800) 800A (800) 800A (LTR) 2000A F (2000) 800A (800) 800A (LTR) XFMR A XFMR B 구 (800) (800) 人(800) F (800) 13.2KV-4.16KV 13.2KV-4.16KV 1000/1333KVA 1000/1333KVA AA/FÁ @150°C AA/FÁ @150°C Z=5.75% @1000KVA Z=5.75% @1000KVA UNIT 1/2 UNIT 1/2 BUILDING/
PJFF/SCR/ PAC/ HVAC/LIGHTING
FLY ASH SORBENT/BOP MCC
MCC MCC UNIT 1/2 UNIT 1/2 BUILDING/
PJFF/SCR/ PAC/ HVAC/LIGHTING
FLY ASH SORBENT/BOP MCC
MCC MCC TYP LARGE 460V MOTOR TYP LARGE 460V MOTOR CLOSE COUPLED — CLOSE COUPLED 1200A 1200A UNIT 1/2 COMMON AQC UNIT 1/2 COMMON AQC 4160V SWITCHGEAR A
1200A, 50KAIC, (K=1),3ø,3-WIRE 4160V SWITCHGEAR B
1200A, 50KAIC, (K=1),3ø,3-WIRE 二 360A 二 360A 360A (450) HP (450 HP PRESSURE TRANSFER BLOWER PRESSURE TRANSFER BLOWER PRESSURE TRANSFER BLOWER TRANSFER BLOWER

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