

POWER FAILURE

Aspects: Aeration basins, dewatering, drying

Frequency: As needed

Location: Plant

Listen for generators to come on

Blower building

RPS # 1

RRPS #2

Solids handling building

As lights come back on, go to:

RPS #1

Confirm that Clarifier numbers 1 and 2 arms are on

Confirm RAS pumps

Confirm WAS pumps (if wasting)

RPS #2

Confirm that Clarifier numbers 3 and 4 arms are on

Confirm RAS pumps

Confirm WAS pumps (if wasting)

SO₂ building

Restart injector/water pump (vacuum pressure for injector)

Switch on wall left of entrance door

Verify water flow (visible in GPM vial on wall should be about 20/30 gpm)

You should hear injectors working

Verify vacuum (approximately +/- 20 inches, min. 5 inches)

Verify feed pressure to sulfinators

Verify power to evaporators (power 'on' light)

PSI

Water temperature

Gas temperature

Corrosion control system 'cathodic protection' (mid-scale)

Chlorine building

Cl₂ sampler pump at effluent chamber

Restart pump by resetting on GFI switch

Other pump should already be running from SO₂ reset

Chlorinating room

Verify power to Cl₂ evaporator pressure from Cl₂ evaporator

PSI

Water temperature

Gas temperature

Corrosion control "cathodic protection" (mid-scale)

Water flow from sampling line

Vacuum on injector line

Flow in feed tube

Solids handling building

Check SHB digesters to verify mixers are on, if needed

Check blowers

Check filtrate

Influent bar rakes

Verify they are moving

Reset alarms, if needed

Influent building

Reset compressor alarm in basement

Reset septage blowers, if needed

Verify sump pumps are working (switch to manual momentarily)

Verify influent sampler is operating

Blower building

Generator should be running automatically, if not, manually start

It takes 15-30 minutes for blowers to restart

Generator will provide power to Blowers 1 & 2

When power is restored, blowers should restart automatically (whether powered by generator or on line)

If nothing happens after 45 minutes, restart blowers manually

At control panel, scroll #7, this will provide all settings on display screen

Lead/lag

CFM settings

Blowers programmed

If any alarms are active, the type of alarm will appear on the display screen

The large white display buttons will flash the appropriate alarm

Reset the alarms prior to attempting a blower restart

Check main circuit breaker panel #1.

Follow instructions to reset the panel, if needed

If panel needs to be reset, the timer sequence starts at the time (regardless when power was restored)

Blowers will restart in sequence programmed into the run computer

If any blower needs to be run on hand, the manual valve sequence sets the amp readings to match those the computer is using automatically (adjust the dial slowly and carefully)

Brief overview of operating limits:

Desired DO saturation level is 1-1.5 ppm (mg/l)

2 blower limit is 19500 cfm

3 blower limit is 29500 cfm

After 29500 limit is 39000 cfm

Keep butterfly valves on

Air headers adjusted to keep SAB & NAB air balanced

USE DO saturation on effluent DO meters as a gauge

Open/close valves as needed

Verify NAB/SAB wired DO meter with handheld unit

Evaluate and adjust as necessary

Corrective Operational Considerations

All operators must inform senior operator on shift of changes they are going to make to operation. Senior operators must approve and verify all corrective actions,

SO2 BUILDING

- Turn on SO2 pump.
 - Inside door to the left you'll hear water start through injectors.
- Check SO2 evaporator for proper ranges.
- Check sulfonators for proper ranges.
- Check water flow at 20-40GPM and pressure at 40-60PSI.