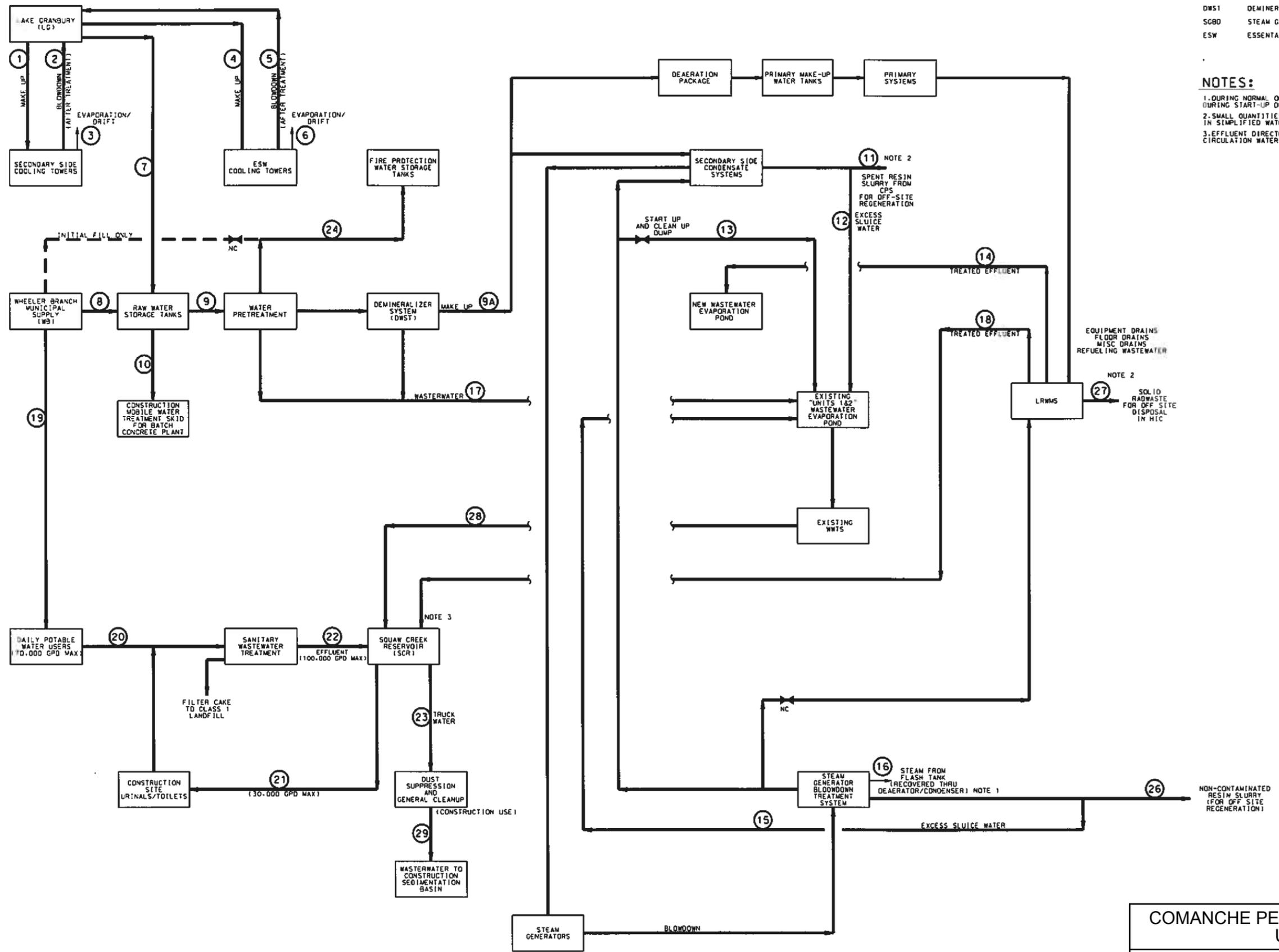


LEGEND

- LG LAKE GRANBURY
- SCR SQUAW CREEK RESERVOIR
- WB WHEELER BRANCH MUNICIPAL SUPPLY
- WWTs WASTEWATER TREATMENT SYSTEM (NON-RADIOACTIVE)
- LRWMS LIQUID RADIOACTIVE WASTE MANAGEMENT SYSTEM
- DWST DEMINERALIZED WATER STORAGE TANK
- SGBD STEAM GENERATOR BLOWDOWN
- ESW ESSENTIAL SERVICE WATER

NOTES:

1. DURING NORMAL OPERATION DUMP TO DEAERATOR. DURING START-UP DUMP TO CONDENSER.
2. SMALL QUANTITIES OF SLUICE WATER NOT REFLECTED IN SIMPLIFIED WATER BALANCE SHEET.
3. EFFLUENT DIRECTED TO UNITS 1 & 2 CIRCULATION WATER DISCHARGE.



**COMANCHE PEAK NUCLEAR POWER PLANT
UNITS 3 AND 4**

Water Balance
FIGURE 3.3-1 (Sheet 1 of 3) Rev 0

Stream	Description	Flow @ Max Power Operation	units	Waste Constituents	Comments and References
1	Cooling Tower Makeup from Lake Granbury (LG)	31,341/Unit 3	gpm		Secondary Side Water Cooling System Study Case1Ba (revised by RFI-0202) From Lake Granbury to Cooling Tower Section 5.0 Optimization Study SSCWS - Final Report dated 8/15/07
2	Cooling Tower Blowdown to Lake Granbury (LG)	12,929/Unit 3	gpm	TDS- 3 times LG value; Free chlorine- less than 0.2 ppm; sulfate, phosphate and trace anti-scalants will be below permit limits.	Secondary Side Water Cooling System Study Case1Ba(revised by RFI-0202) From Cooling Tower to Lake Granbury (LG) Section 5.0 Optimization Study SSCWS - Final Report dated 8/15/07
3	Cooling Tower Evaporation + Drift	18,412/Unit 3	gpm		Secondary Side Water Cooling System Study Case1Ba(revised by RFI-0202)
4	ESW Cooling Tower Makeup from LG	274/Unit 3	gpm		(revised by RFI-0202)
5	ESW Cooling Tower Blowdown to LG	109/Unit 3	gpm		(revised by RFI-0202)
6	ESW CT Evaporation Loss + Drift	165/Unit 3	gpm		(revised by RFI-0202)
7	Raw water from LG to storage tanks	320- 1,100/Units 3 &4	gpm		A blend of LG and potable water is expected. Minimum make-up for operation is estimated from Luminant at ~ 200 gpm/Unit. Maximum construction flushing is estimated at ~500 gpm/Unit. Normal for 2 unit Ops will be 320 gpm from LG with remaining 230 gpm from WB.
8	Potable water from WB to raw water storage tanks	0 to 300	gpm		Assumed a 300 gpm uninterruptible supply of potable water from Somervell County Water District (SCWD) for the URS estimates..
9	Raw water to pretreatment	1,100 to 1,250 for Units 3 & 4	gpm		Assume 80% recovery as demin water. 550 gpm is the normal MU for U3/4 Ops. ~50 gpm to existing evap. Pond, 200 gpm to U 1/2 Ops, and 300 gpm to
9A	Demineralized Make-up to Primary Water Tanks	200 to 500 per Unit			See 7 above.
10	Raw water to construction mobile treatment skid	250/Units 3 & 4	gpm		URS estimate.
11	Spent resin slurry from CPS	N/A			Neglect for simplified balance
12	Excess sluice water from CPS	N/A	gpm		Neglect for simplified balance
13	SGBD blowdown wastewater to existing evaporation pond	1,165 (see comment)	gpm		Assume during plant startup flow duration will be 4 hrs. Normal power operation flow duration is to be determined.
14	LRWMS effluent to new evaporation pond	2,000	gals/day		Rad waste estimate. Assumed 50% of total released effluent from LRWMS.
15	Excess sluice water from SGBD treatment	N/A	gpm		Neglect for simplified balance
16	Evaporation from SGBD flash tank	N/A			Evaporated steam is condensed and recovered in the main condenser.

COMANCHE PEAK NUCLEAR POWER PLANT
UNITS 3 AND 4

Water Balance
FIGURE 3.3-1 (Sheet 2 of 3)

Rev 0

<u>Stream</u>	<u>Description</u>	<u>Flow @ Max Power Operation</u>	<u>units</u>	<u>Waste Constituents</u>	<u>Comments and References</u>
17	Water treatment wastewater to existing evaporation pond	50 to 250 for Units 3 and 4	gpm	pH- 6 to 9; TDS- 5 times feed water TDS; resin regeneration salts- sodium sulfate, calcium sulfate and sodium chloride; suspended solids & silts- from filter back wash.	Expected ~ 50 gpm. URS estimate. Assumed 80% recovery of feed water as demin. Water.
18	LRWMS effluent to existing U 1/2 circ. Water discharge.	2,000	gals/day		Design condition for Tritium sends 50% of 4000 gpd to SCR. Rad waste estimate. Assumed 50% of total released effluent from LRWMS.
19	Potable water to daily potable water users	50/Units 3 & 4	gpm		URS estimate.
20	Sanitary wastewater from potable water toilets/urinals	70,000/Unit 3 & 4	gals/day		Sanitary wastewater treatment system's COLA concept design report
21	Non-potable water to construction toilets/urinals	30,000/Unit 3 & 4	gals/day		Sanitary wastewater treatment system's COLA concept design report
22	Sanitary wastewater treatment systemt effluent	100,000/Unit 3 & 4	gals/day	Effluent will meet permit limits (see SWTS System Description for permit limits).	Sanitary wastewater treatment system's COLA concept design report
23	Dust suppression & general cleanup water	63,000/Units 3 & 4	gals/day		Trucked to user locations Construction estimate.
24	Fire protection water storage tank makeup water	N/A			Neglect for simplified balance. Initial fill is from potable water supply.
25	Evaporation loss from fuel pool tanks	N/A			Neglect for simplified balance
26	Non-contaminated resin slurry from SGBD treatment system	N/A			Neglect for simplified balance
27	Solid radwaste for off site disposal in HIC	N/A			Neglect for simplified balance
28	Existing pond wastewater treatment system effluent	N/A			Neglect for simplified balance
29	Wastewater to construction sedimentation basin	63,000/Units 3 & 4	gals/day		URS construction estimate.

COMANCHE PEAK NUCLEAR POWER PLANT
UNITS 3 AND 4

Water Balance
FIGURE 3.3-1 (Sheet 3 of 3)

Rev 0