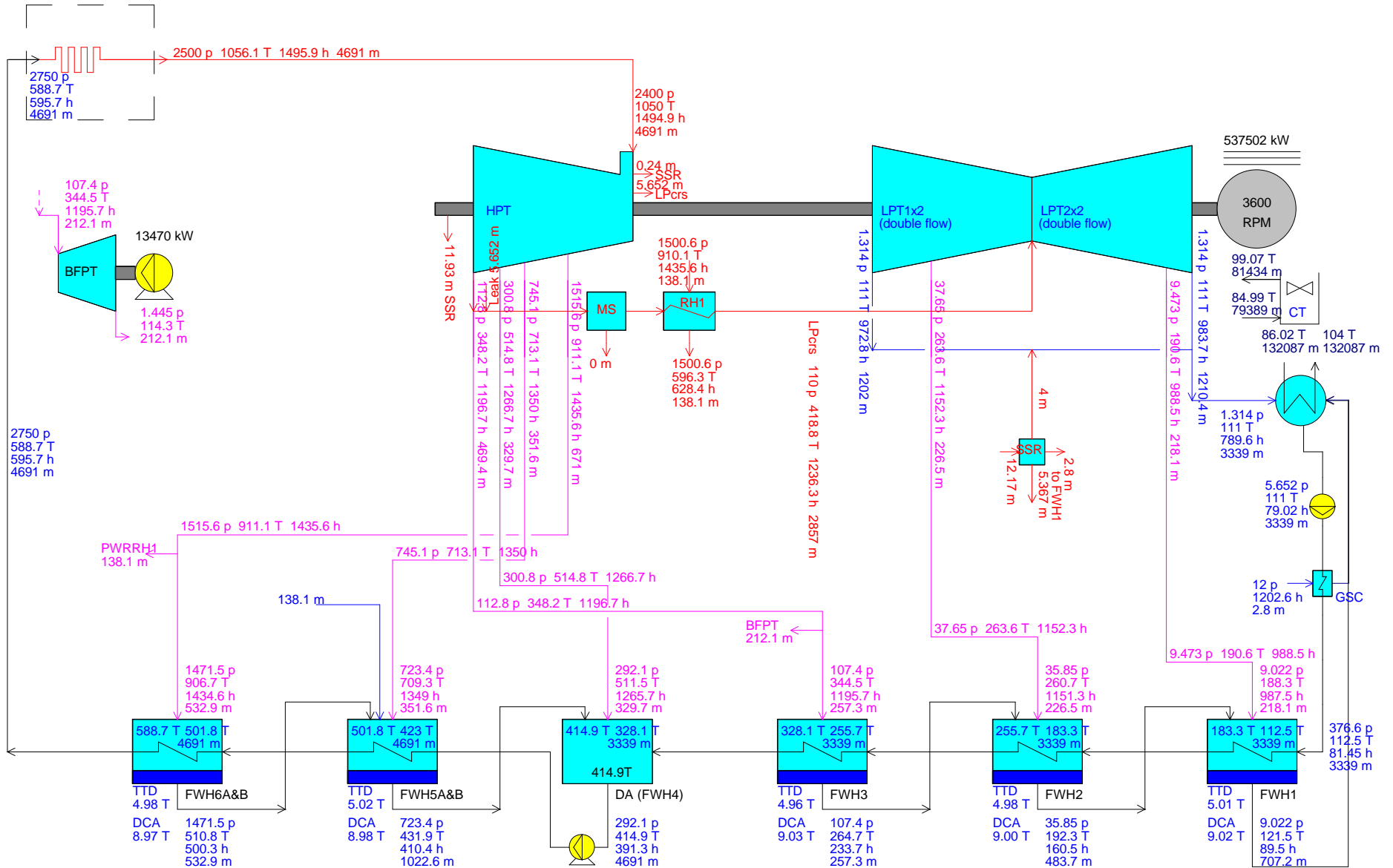


NET POWER 520252 kW  
STEAM CYCLE HR 7856 BTU/kWh

AUX 17249 kW  
TURBINE HR 8055 BTU/kWh

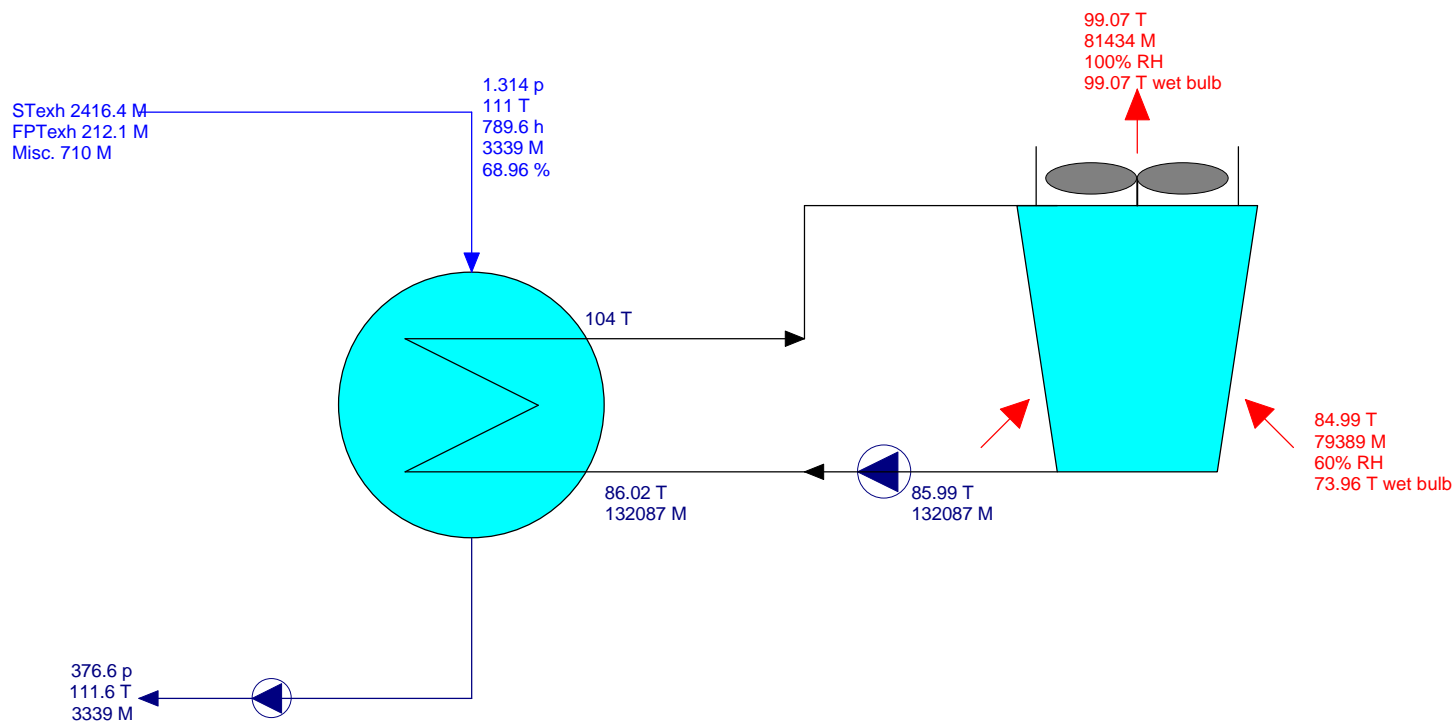
STEAM CYCLE EFF 43.43 %



Intermediate Loop to Steam Generator Only - Reheat at LP Crossover  
Excludes Reactor Island Auxiliary Loads

STEAM PRO 23.00 BR 84 03-07-2013 15:54:59 Steam Properties: IAPWS-IF97  
FILE: G:\TransAtomic\PRELIMINARY DESIGN - INTERMEDIATE LOOP TO SG ONLY - RH AT LP CROSSOVER.STP CYCLE SCHEMATIC  
p[psia], T[F], h[BTU/lb], m[kpph]

Condenser heat rejection	659012	BTU/s
Condensate pump power	1638.6	kW
CW circulation pump power	5737	kW
Cooling tower fan	2562.1	kW
CW blowdown	511.2	kpph
CW makeup	2556	kpph



Intermediate Loop to Steam Generator Only - Reheat at LP Crossover  
Excludes Reactor Island Auxiliary Loads

p [psia] T [F] h [BTU/lb] M [kpph]



STEAM PRO 23.0 BR Burns & Roe Enterprises, Inc.

84 03-07-2013 15:54:59 G:\TransAtomic\PRELIMINARY DESIGN - INTERMEDIATE LOOP TO SG ONLY - RH AT LP CROSSOVER.STP

CONDENSER: Water cooling with mechanical draft cooling tower					
	P	T	h	M	
	psia	F	BTU/lb	kpph	
LPT exhaust	1.314	111.00	978.3	2412.4	
LPT SS to condenser			1202.6	4	
FPT exhaust	1.445	114.33	979.1	212.1	
Drain from GSC	12.000	202.03	170.0	2.8	
Flashed from FWH(s)			89.5	707.2	
Condenser in	1.314	111.00	789.6	3339	
Condensate well	5.652	111.01	79.0	3339	
Before C.W. pump		85.99		132087	
After C.W. pump		86.02		132087	
Cooling water in		86.02		132087	
Cooling water out		104.05		132087	
Condenser C.W. pump power =	5737	kW			
Condenser heat rejection =	659012	BTU/s			
COOLING TOWER (Mechanical Draft)					
	P	T	Twet bulb	M	RH
	psia	F	F	kpph	%
Air in	14.70	84.99	73.96	79389	60.0
Air out	14.70	99.07	99.07	81434	100.0
C.W. from main condenser		104.05		132087	
Hot water in	30.17	104.07		132087	
Cold water out	14.70	85.99		132087	
Makeup				2556	
Blowdown				511.2	
Cooling tower heat rejection =	684085	BTU/s			
Additional heat rejection to CT =	20000	BTU/s			
Cooling tower fan power =	2562.1	kW			