DIAGRAM 3B:
Hydrodynamic Power Technology Type B P&ID

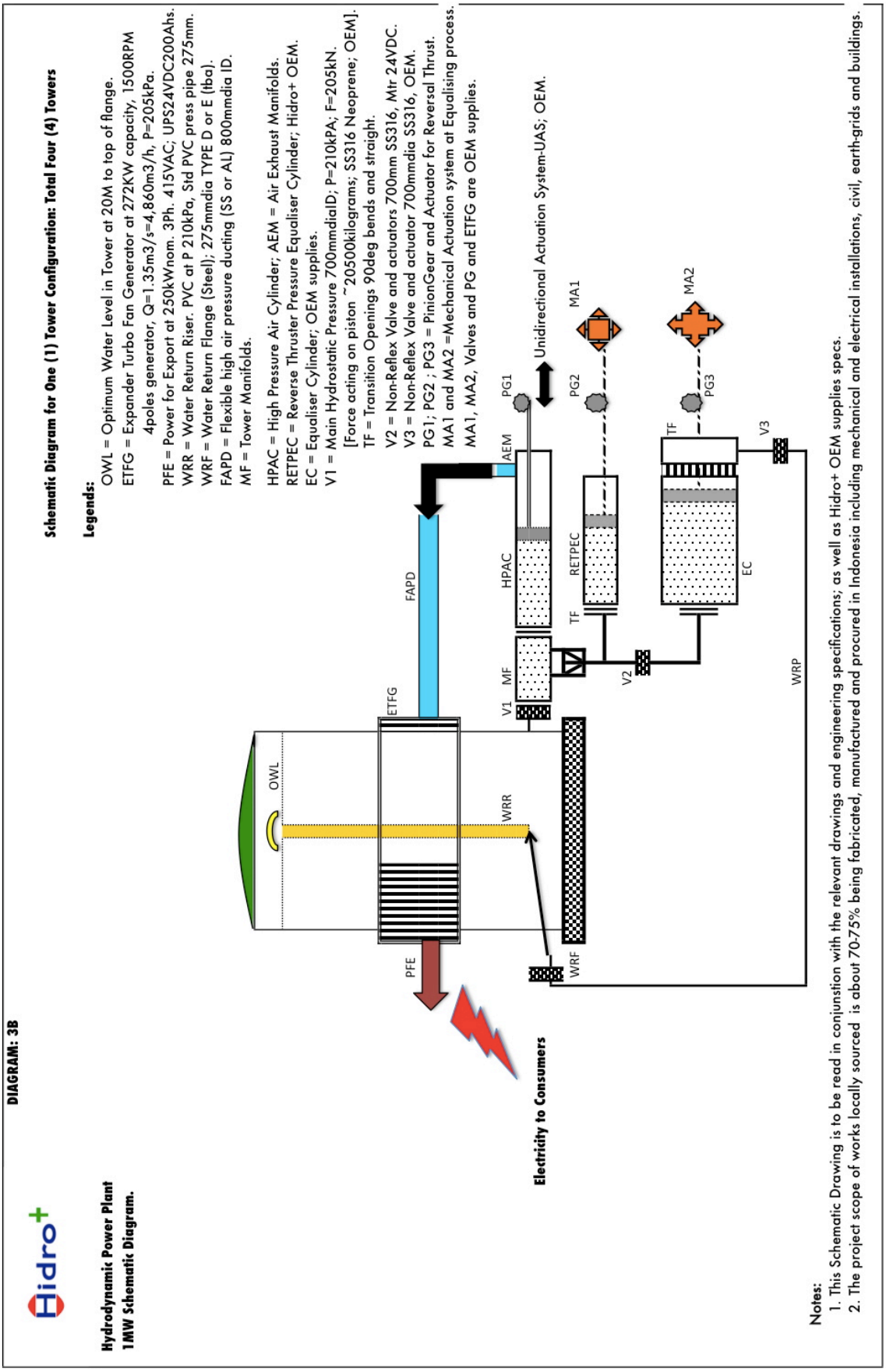
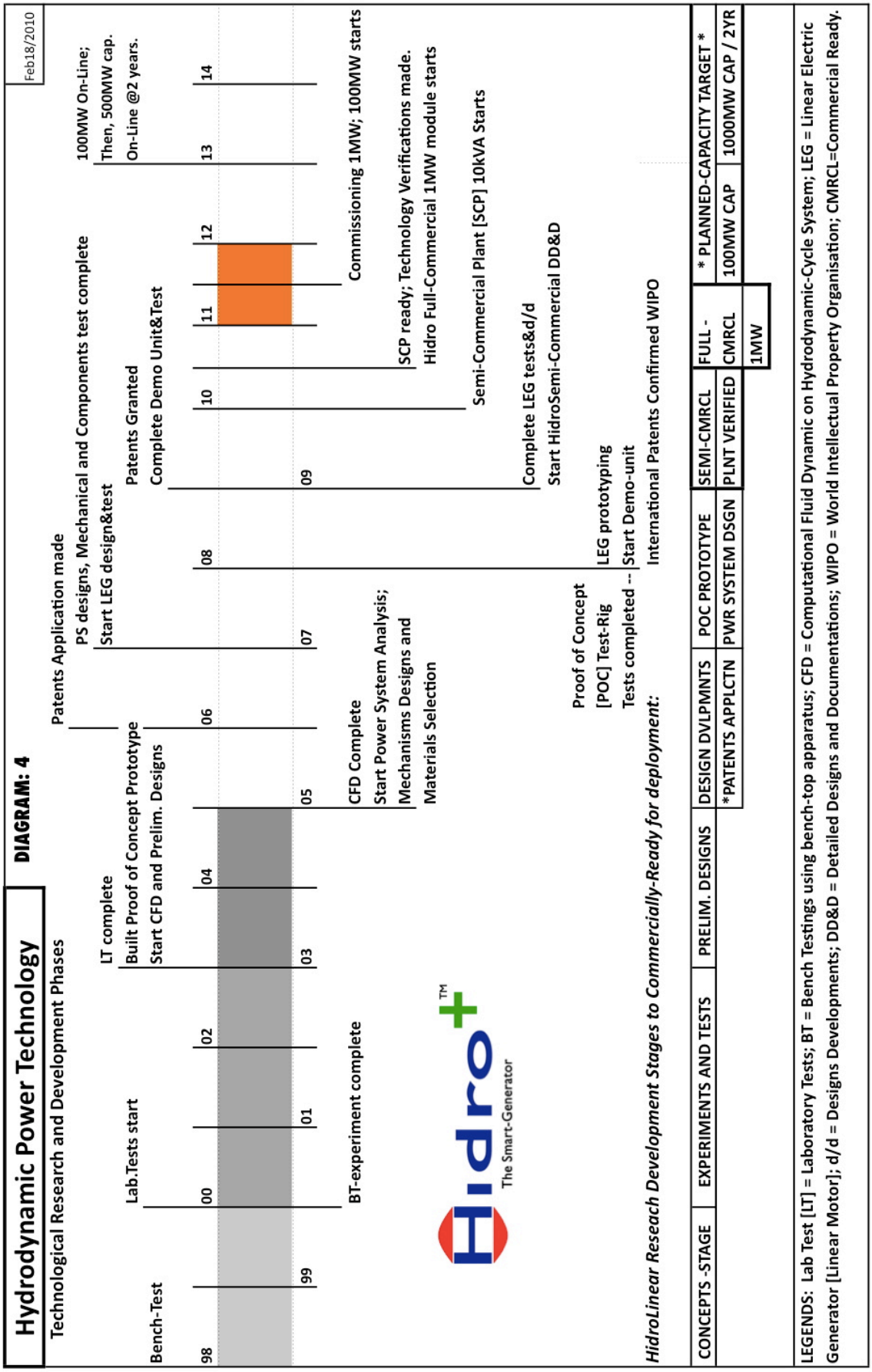


DIAGRAM 4:
Hydrodynamic Power Technology: Development Phases.



APPENDIX 5:

Level 7, 134 Macquarie Street, Hobart TAS
GPO Box 1550, Hobart, TAS 7001 Australia

Enquiries: Darryl Cook
Ph: +61 3 6233 2105 Fax +61 3 6233 6800
Email: Darryl.Cook@environment.tas.gov.au
Web: www.epa.tas.gov.au
Our Ref: 112248: (EEO/eas/p/Hidro renewable energy - PaperLinx Wesley Vale/c/C01_Assess_Advice]ars

ENVIRONMENT PROTECTION AUTHORITY

14 October 2011

Mr James Kwok
Hidro+

Dear Mr Kwok

RENEWABLE ENERGY FACILITY / 226 MILL RD WESLEY VALE

Assessment Advice

I write to confirm informal advice provided by this office concerning installation by Hidro+ of 1,000MW of renewable generation capacity at the former paper mill site at 226 Mill Road Wesley Vale.

I note that the installation is intended in two stages, namely 100MW (Stage one) followed by 900MW (Stage two). I also note from information previously provided by Hidro+ and Latrobe Council that the project is not likely to present significant pollution or public health risks, that the development at this site is a permitted activity under the local planning scheme, and that it is to be installed within the footprint of the existing industrial complex. I am therefore of the view that the proposal in its current form (for Stage 1 only) will not require assessment in accordance with the environmental impact assessment principles set down in section 74 of the *Environmental Management & Pollution Control Act 1994*. Should Council refer the development application to this office I will advise Council that assessment by the Board of the Environment Protection Authority is not required.

Notwithstanding the above, the large scale and unique nature of the proposed project (particularly Stage 2, for generation of a further 900MW of electricity) may warrant 'call-in' for assessment by the Board of the Environment Protection Authority. As such, I recommend that you submit a new Notice of Intent prior to commencing Stage 2, so that a determination about the need for environmental impact assessment can be made. The Stage one project is expected to provide information to guide the EPA's view on whether 'call-in' is warranted.

If you have any queries regarding the above, please contact the officer nominated at the head of this correspondence.

Yours sincerely

Alex Schaap
DIRECTOR, ENVIRONMENT PROTECTION AUTHORITY

cc: Mr Gerald Monson, General Manager, Latrobe Council, PO Box 63 Latrobe Tas 7307

APPENDIX : 6A

Hydrodynamic Power [HP] Pre-commercial Plant Commissioning and Operating Tests-data. Mar-11
Plant located at Mitchell Eco Industrial Estate, Quinn Hill East Rd, Stapylton, Gold Coas Queensland, Australia.
Attendance: Simon Tutureski CEng; Manuel Caballes BSc CEng; Dr Rajinder Malik PhD; Deepak Kumar RPQS; James Kwok CPEng FIEAust.

The plant was operated for a period of 24 hrs on continuos basis and operating data was recorded, operation was video indepedently.
The principle statistics of the Hydrodynamic Power pre-commercial plant:

Descriptions	Dia-m	High-m	Area-m2	Vol-m3	Lngth-m	T-sec	V-m/s expctd	Hd Prs-m	Force-kN	Amps used	at T-sec	Power-kW kWs/PC
Main Tower	0.8	6	0.5024	3.0144								
Out-Flange	0.32		0.08038									
Main Valve ⓘ	0.32		0.08038	0.8717			10.8443534					
Return-Duct	0.2		0.0314									
Retrn-Valve ⃠	0.2		0.0314	0.3405								
Thrust Cyl	0.32		0.08038									
Thrst-Piston	0.3		0.07065						***4.239*** ☒			
Thrust Dist			0	0.0389	0.55	0.045						
Thrust time			0			0.85						
Bernoulli's			0				10.8443534	60				
Effctv Head-P			0					6				
Equalsr Rsrvr	0.8		0.5024		1.1			11				
Riser to Rsrvr	0.2		0.0314		4.3							
Rsrvr Piston Ⓟ	0.8		0.5024						***5.5264*** ☑			
# at Equalistn					0.55							
Equalsr Valve ✪												
Actuator/Mtr												
at ⓘ										5	1.8	216
at ⃠										2	1.2	57.6
at Ⓟ										9	3	648
at ✪										2	1	48
Tot Actrs Amps	* Actual hydrostatic energy converted to do work.									**18**	**7**	**969.6**
Genrtr O/put								Amp Meter ~data		128.5		3084
F Cy Pstn onEvac												
F Pstn at Ⓟ												
Power Thrst	* Theoritical Value; being transformed energy onto usable electrical energy.											3.60315
Power Cycle	* Actual time-period 7 to 8											
TotPwrO/put /PC	* Actual total power output per power-cycle in kWs.											***3084***
Tot Amps/PC	* Actual Amps drawn to do the work for continuous conversion.									18		
Net Energy Gain	* Computed and Actual attained at contiuous plant operation runs in kWs/power-cycle.											***2114.4***
Load systems	* Actual load systems powered continuously at running operation.											***1950***
Evacuatn system	* Actual evacuation process&mech system effectiveness proven-up in totality.								***1.2874*** ✔			

Computation Formulas applied and explanations:

1. Power Available from Thrust Cylinder = Thrust (kN) x Velocity (m/s); kJ/s=kW.
2. Water transverse Velocity = Sqrt[Pressure x 2g]; kN/m2÷2[9.8m/s2]; m/s.
3. Forces acting on Piston = Pressure x Area; kN/m2 x m2; kN.
4. Water transverse Velocity on Valve openings = Q÷A; m3/s÷m2; m/s.
5. Water Quantity across valve openings = A x V; m2xm/s; m3/s.
6. Time period for water tranverse openings = actual Q÷Computed Q; seconds.
7. Generator is 3ΦAC rectified to 24VDC 200Amps max, via a 5kW inverter and 200Amps circuit-breakers.
8. Total Pressure in the Tower is 60kPA at 10kPa/m.
9. Total Pressure in Equalising-Reservoir as ΔP=1.1m water head; or 11kPa. This equalising pressure gradient results in Force at Reservoir-Piston being available to do work at exhaust-cycle in Thrust cylinder to evacuate water and return to equalising reservoir.
10. The Valves are closing to pressure; as well as open to pressure. Actuation occurs at equalibration mechanically locked, and thus minimise power requirements to do work. Consequently, increased Net Energy Gain being from the power transformed at the Thrust Cylinder less the energy converted to do various works as sub-systems in the one-system.
11. HP commercial plant designs having much up-staged features with major mechanical parts reliability issues addressed have been well documented, and thus better efficiencies and performance will be comfortably achieved.
12. Load systems applied and powered by the plant was: 2 x 500W flood lights; 4 x 150W spot lights; 3 x 100W strobe/laser lights and screen display. The total load system applied = 1,950W being powered continuously, as well as power source for the actuators.
13. The Batteries 2 x 12VDC in series at end of tests, volt meter reading at 24Volt, this confirms the Net Energy Gain as the batteries are rated at 33 Amphrs are also being charged continuously during the continuous operation runs of the plant. This also confirms the proper functioning of the electrical circuitries, operational logic system and control philosophy of the Hidro+ pre-commercial plant successful commissioning and tests.
14. The critical evacuation process is proven in entirety both in engineering-computations and in actual operating system; with positive results stated above Reversed-Force☒ being overcomed by Equalising Force☑ resulting a positive-vector force✔,thus continuous repeat cycles attained.

Refer Process Schematic Diagram
Valve M1 = ⓘ; M3 = Auxiliary 4 M5
Return Valve M2 = ⃠
Equaliser Reservoir Piston = Ⓟ
Equaliser Valve M6 = ✪
Actuator at Equaliser Reservoir = M5

Plant Equipment Setting Changes during Commissioning Tests:

1. Due to an 'explosion' being an overshot piston-shaft and damaged at safety stopper whilst flywheel disengaged, the thrust transverse distance was reduced from 950mm to 550mm. This is due to piston in cylinder off-concentricity at the 400-450mm upper section of the cylinder.
2. Should the plant operates at its full designed thrust, then the theoritical value of power available can be harnessed, will be achieved.

APPENDIX : 6B