ENVIRONMENT AGENCY: Outline Risk Assessment (ORA) Template

Site name:	Marlow	
Developer name:	SEPEL	Developer reference number:

Item	Identified Risk (text)	Likelihood of occurrence (H, M or L)	Potential impact on time / programme (H, M or L)	Potential impact on cost £	Mitigation (text)	Explanatory comments (optional text)
1	The design is not approved in whole or part by the Enviroment Agency causing significant project delay or cancelation.	L	M	[redacted]	SEPEL will have a full understanding of the Environment Agency's design criteria early in the project to ensure harmony in the project. Additionally, SEPEL has several design concepts for hydropower development on Marlow Weir enabling second and in some cases third acceptable design.	SEPEL have studied Marlow Wier and the flows at this site for nearly three years. During this timeframe we have have matured several design concepts, consequently we have several design options already conceptualized.
2	The design does not perform to specification	L	H		UK qualified and hydropower experienced design experts will be used for civil engineering and electrical design works. Additionally, Environment Agency approved design engineers will be employeed to certifya nd approve all major elements.	The rent for Marlow Weir will be partially based on system revenues, it is therefore imparative that the system is designed and operated by experienced companies like the SEPEL, XXXXXXXX team.
3	Approvals, i.e. Abstraction, flood risk abatement, impoundment, PLA, Planning etc. are refused.	L	H		Early, preplanning contact and discussion with planners, engagement of local residents, and adherance to the EA's Good Practices Guideline for Hydropower.	SEPEL have experience with both planners and local residents having gained support from both in Windsor and Eton on a very controversial hydropower project. Additionally, SEPEL is designing the system to actually increase flow through the weir.
4	The system is designed to standard, published total head height and head duration curves.	L	H		SEPEL have data from our own head level measurements taken at various river flow levels in the precise location of our proposed turbine installation	If an inexperienced development team is chosen, head duration mistakes are only one of many potentially critical miscalculations that are not apparent and waiting to be discovered too late.
5	Construction mishaps that cause injury to personnel and/or damage the environment	M	H		All contractors must provide a written statements of health and safety policies and a proven record of adherance to them through proof of performance. Additionally, risk assesments will be carried out on all tasks associated with the project by an independant professional.	Environmental mishaps or accidents have the potential to put the projects success at risk. H&S is therefore taken as seriously by SEPEL and it's development team, as it is by the Environment Agency
6	Construction delays	M	H		Our hydropower experienced contract design manager will be responsible for design review of all drawings and plans, run regular planning meetings among the subcontractors and implement both design and method change control.	
7	Poorly designed/followed maintenance regime	L	H		Research and development of the Romeny hydropowe project has yielded a very robust and complete maintenance and testing schedule.	Due to SEPEL's integration of a full maintenance regime notification program in the PLC for all system components, the Enviroment Agency can be assured that run-a-way head levels upper reach depletion or other mishaps are unlikely to occur due to poor maintenance and component failure.
8	The hydropower system fails to operate under the conditional requirements of the operating agreement	L	M		SEPEL have designed an operational system for a similar project on Romney Weir that has many features that can be reused on Marlow.	Injury to fish, flooding or depleted upper reach are just a few of the possible problems that will occur if an incomplete or poorly designed operation system are developed and installed
9	Construction cost over-runs	M	H		Utilize an experienced team of construction, design, H&S and turbine build/tune who have experience on the River Thames and its wiers	SEPEL builds an appropriate contingency value into all projects
10	Contractor or Subcontractors inability to perform	L	H		SEPEL's proven team of hydropower professional are tested and proven	A restoration/restitution bond will be carried by SEPEL during the construction process to ensure the Environment Agency is indemnified