



Department of Energetic Affairs Los Verdes City Council Universal Boulevard, Los Verdes, LV 93100

Dr M Spark Account Director High Tension Power Inc Universal Science Park Los Verdes LV 93106

## Dear Dr Spark

Thank you for your recent response to our Invitation to Tender for the new development project Capital City. We are extremely excited about this development and I am pleased to inform you that the Department of Energetic Affairs has been more than impressed with your initial assessment. As such, we are now inviting you to submit a more detailed analysis over the next few weeks. I am providing you with some further background information that was compiled by a sub-division of the City Council (Planning and Estates). It is incomplete, but nonetheless, should provide you with some useful information to work with, and I would advise you to pass this on to your team.

As I am sure you will appreciate, we are also passing this invitation on to a number of other energy consultancy firms in the region, and I would therefore encourage you to provide us with some feedback at your earliest convenience.

The Department of Energetic Affairs has been advised by an independent financial consortium that it must consider both short- (0-20 yrs) and long-term (20-50 yrs) plans in any strategy, and that these must focus on 'Economical, Environmental and Eye-catching' aspects. It is unlikely that our future needs will be met by a single or existing energy source alone.

I look forward to hearing from you soon.

Yours sincerely

G. Peck Department of Energetic Affairs LV-DEA letter.doc

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... Investigating the possibility of expanding the 'casino' district of Los Verdes, in south west USA – a project termed 'Capital City'. As part of this pilot study, we have been charged with considering some of the energy demands of this expansion project. This region is ideally located for expansion, with potential for growth within the commercial sector (financial industries, communications, new technologies) and also within the leisure industry, including hotels, casinos and Bio-sphere recreation and retreat centres. Recent figures reveal that the region is amongst the top three locations in terms of expanding numbers of visitors for leisure and recreation.

For the past 36 years, energy has been supplied to the region from a fossil fuel driven power plant – costs *ca.* 40 US\$MWh<sup>-1</sup> – but this is due to cease operation in five years time. A replacement facility, based on the same technology and current power demand (100 MW) is due to begin construction over the next two years.

However, there is growing concern over environmental issues related to the emissions from fossil fuel derived power, especially as the location of the city is generally up-wind of the current power facility. There is little opportunity to re-locate the plant (or its replacement) due to water supply demands, and public awareness of the likely increase in energy demand is causing growing concern. Some data on current emissions have been determined recently which show that CO<sub>2</sub> emissions are typically 1 000 kg MWh<sup>-1</sup>, with SO<sub>2</sub> and NO discharges being approximately 1% of this value.

It is projected that the increase in energy demand will be of the order of 150% over the next 20 years, rising to as much as 250% in 50 years time. Future plans for energy provision will clearly need to consider these projections, current (and therefore minimum) demand, increasingly stringent demands from environmental legislation (including costs), and the potential to introduce and re-invest in, new technologies. Our next recommendation is to...