



Tier1Research

Advanced Data Centers Sacramento facility update

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Wednesday, August 20, 2008

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T1R spoke with Advanced Data Centers (ADC) and received an update on the progress of [ADC's Sacramento area datacenter](#), and the firm provided information on some interesting developments. Although some in the industry have expressed skepticism about the ADC project, T1R is quite optimistic.

Construction status

ADC has thus far spent approximately \$45m on the project and will need to secure customers to get financing for the final tranche. T1R believes that due to the relatively low supply, high demand and cheap and efficient power offered at this facility near Silicon Valley, ADC won't be waiting very long for customers. That this is a pod/cell datacenter is also a plus. While the colocation supply is tight, pod datacenters are almost nonexistent in the greater Bay Area.

ADC expects to initially bring two 10,000-square-foot pods online in the April 2009 timeframe, offering 5MW right off the bat. T1R expects the remaining nine pods to be fully built out in the following 12 months. Built, sure... but booked? T1R thinks so: the facility could easily be fully booked by the end of 2009, given historic supply/demand and datacenter inventory absorption.

Eat your heart out, Michael Phelps - ADC got platinum

As was mentioned in the previous report, the Sacramento ADC datacenter was constructed with 'green' in mind. ADC was able to achieve a LEED pre-certification rating of platinum, making it the only platinum-rated datacenter in the country to date. Does a platinum LEED certification monetize? There are certainly positive marketing benefits, not to mention long-term cost benefits with rising fuel and energy costs. Probably the most interesting and almost radical claim was that ADC will be able to achieve an average Power Utilization Efficiency (PUE) factor of 1.13. This is much improved from the previously expected value of 1.2. A PUE factor of 1.13 essentially means that 87% of the incoming power is delivered and put to 'real work' by the rack equipment. In other words, 45MW of incoming power will allow for approximately 39MW of customer load and approximately 6MW of power consumed by the support infrastructure.

From what T1R can tell, that PUE is predicated on the use of outside air economizers, flywheel CPS units and just about every power-saving design feature so far discovered. Will ADC pull this off? T1R is a bit skeptical whether the design will prove to be so power efficient in actual operations. Certainly, weather will come into play with the

greater reliance on outside air – both temperature and humidity. There's no doubt – ADC has an experienced design team, so T1R is willing to suspend disbelief until the first phase is completed.

The question remains how to monetize the higher building costs for a platinum-level LEED certification. T1R estimates that achieving this certification level may have added 10-15% to the datacenter construction costs. However, T1R expects the additional cost for this certification will not be passed on to customers of ADC's leased datacenter space. Rather, T1R expects these costs to be recouped by ADC over time in operational power savings. But with lower operational costs, ADC has the opportunity to price its datacenter space competitively. But T1R thinks this is not necessary in the tight California datacenter market. T1R thinks the availability of the premium space with the platinum LEED rating will be enough to win over customers. But if energy costs continue to rise, ADC will have the option to pass on some cost savings to customers making their datacenter very competitive.

Sourcing customers

ADC indicated that there are five or six companies that have shown interest in leasing space but have not yet committed. Server-hugging seems to be a major sticking point, as well as the desire for the facility to be commissioned and on line. T1R believes that the ADC Sacramento datacenter is close enough to the San Francisco Bay Area that server-hugging concerns are simply unfounded. ADC's location makes much more financial sense than an equivalent backup datacenter in downtown San Francisco – not to mention the disaster recovery connotations. As for the 'call when it's commissioned' folks? Well, they would do well to pull the trigger early before the space is all taken and have to wait for round two.