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Tapping the sun

Designers sketch out vision for solar energy systems at the Great Park.



Byron Stigge is the energy consultant for the Great Park.

By SONYA SMITH
THE ORANGE COUNTY REGISTER MIGUEL VASCONCELLOS, THE REGISTER

IRVINE – Environmental engineer Byron Stigge wants Great Park visitors to think about the environment every time they enter and exit the park.

That's the thinking behind his latest idea for the park: having solar energy systems at each of the park's main entrances.

His initial thoughts are:

Transit entry: Might have a one-acre unmoving, flat solar collector that would be installed 20-30 feet above the ground and would also offer shade

North canyon entry: May have a collection of Solar Sterlings – curved dishes that move to follow the sunlight throughout the day.

Marine Way entry: Possibly a large collection of solar tiles covering parking. These tiles can be installed, like a roof, and also provide shade.

Trabuco Road entry: Might have a collection of solar tiles either around or covering parking.

The engineer said his goal is for just the solar system to generate 1 mega watt of power, enough energy to power 1,000 homes.

"It would be a gateway statement about entering the park and being in a place powered by large-scale renewable energy," Stigge said.

Stigge said the solar energy could power the basic functions of the park: kiosks, bathrooms and lighting, among other things. But, things such as the power-hungry sports park, museums and amphitheater will draw much more power than the solar collectors can supply.

The Energy Information Administration says solar energy's main challenges are the irregular manner in which it arrives at the earth's surface and the large area required to collect the energy at a useful rate.

To read a profile on Byron Stigge, or to read more about the other environmental ideas for the