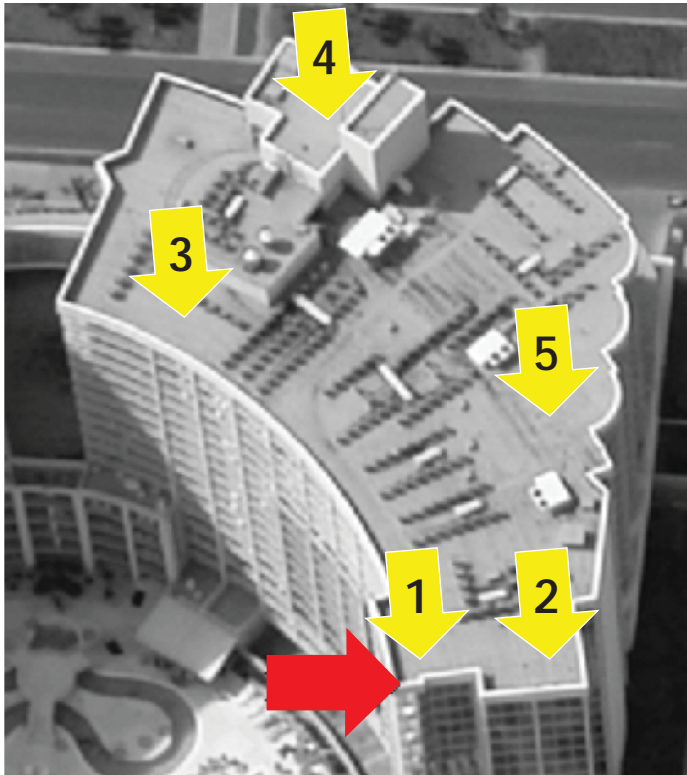


# Avista Resort Turbine Test Site

A recording anemometer station was established on the rooftop of the Avista Hotel in North Myrtle Beach, South Carolina to evaluate resource potential for small wind turbine electrical production along tall oceanfront hotel rooftops.

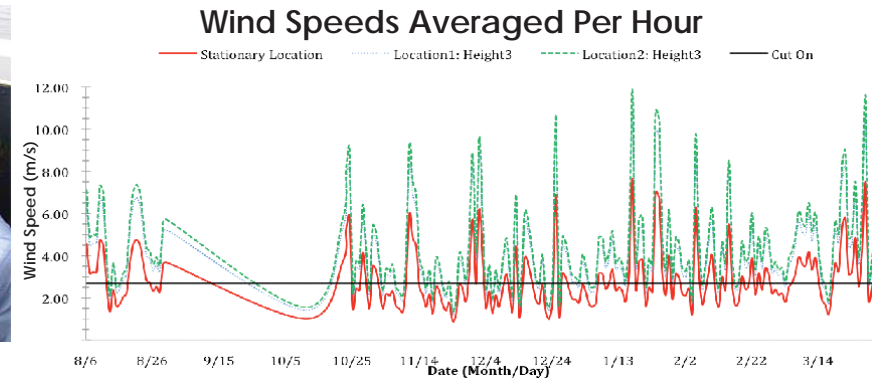
Measurements were made over a 6-month period 7.5' above the roof top along an ocean-facing edge of the building (Red Arrow Below). In addition, a program of short-term measurements around different locations on the Avista rooftop was completed to gauge variability in the small scale wind field at the site (Yellow Arrows Below).



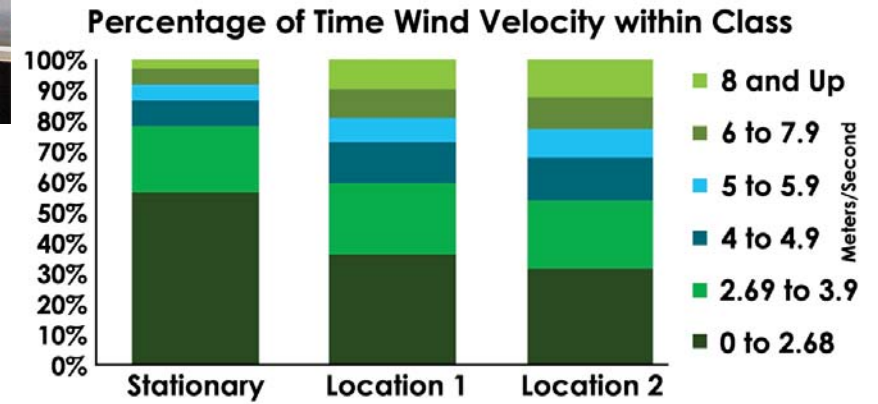
Location of wind measurements taken on the Avista Rooftop (above).

For ocean-facing locations at 17' above the rooftop level, a typical turbine would be contributing electricity to the building up to nearly 70% of the time. (Note boundary and edge effect decreasing wind velocity at the stationary station 7.5 feet above the rooftop.)

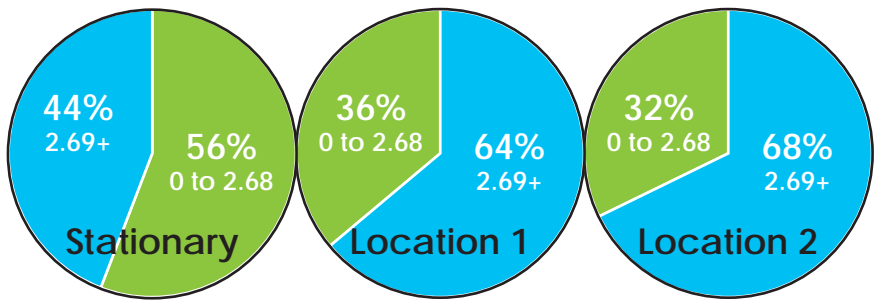
**60 Hotels with rooftop space, 54 beach access right-of-way sites, and plenty of wind yield a renewable energy potential of over 1.5 Million Watts of green power!**



North Strand Coastal Wind Team members installing Anemometer (above left) and making spot measurements of wind (left) on the Avista Rooftop. Wind velocities measured at the stationary recording station over 6-month study Oct '09 – April '10 (above).



Percentage of time wind was measured in various velocity bands over 6-month study at oceanfront rooftop locations (above).



Percentage of time wind velocities (m/s) above 2.69 m/s turbine cut-in velocity for typical vertical axis turbine (above).