

### **Jeffrey Wagner: Award in Economics**

Last spring 2006, I asked my Environmental Economics students to analyze a firm's required financial disclosure statements (the "10-K") with respect to environmental economic content. Dan Irwin elected to study Allegheny Energy's approach to energy deregulation policy in Pennsylvania, his home state. Dan found that Allegheny employed a very clever strategy, whereby it purchased a significant number of marketable permit futures a few years ago as a hedge against the risk that its technological changes (switching to lower-sulfur coal and installing scrubbers at some facilities) may not be implemented on schedule. If Allegheny meets its schedule and its competitors do not innovate accordingly, the marketable emission permits will most likely increase in value, yielding tremendous profits. And if Allegheny does not meet its schedule, it would have the permits in hand to pay for its emissions. As the situation unfolded, the market price for sulfur dioxide permits climbed from around \$150 per ton to a current price of around \$500 per ton, a rate of return that is hard to match during that period. Dan concludes by pointing out that Allegheny may not have allocated the balance of permits and scrubbing intensity correctly across the collection of its power plants. He argues that if this is true, the firm unnecessarily weakened its relationship with its customers—customers who are increasingly aware of the environmental consequences of alternative energy technologies and, in an era of deregulation, can take their business elsewhere. The major goal for the course is to learn the language and conceptual structure necessary to discern the strengths and weaknesses of the actions firms can take. Dan's paper is a model of what can be achieved when one combines theory and practice from multiple disciplines (in Dan's case, a major in computer engineering and a minor in economics) and presents argument with the clarity and engagement we recognize from our very best writers. Indeed, on this public occasion, I should add that Dan is one of the three best writers I've encountered in my six years at RIT.