Meeting Notes for 2/25/2016

Topic Today: Wind Farm intermittency and what it means for campus

* Campus load, generation and wind profile (Described in graph)
	+ Useful information from graph
		- Few times when our campus generation exceeds consumption
		- Majority of generation is from gas turbines
			* Coal used in winter only
			* Gas is “in the money” right now
		- Energy output is sinusoidal, varies during the day
		- Electricity use is higher in the summer
			* Import limit makes peak electricity expensive
			* Demand charge: Notified days in advance
				+ Last year, 1 MW at peak demand saved $45,000
	+ Grid upgrade: Will be able to Import 90 MW instead of 60
* Wind energy is highly variable
	+ Fastest in the winter, and at night
	+ Each day is different
		- December/January highest in generation
			* Campus usually buys the least electricity in these months
			* Wind energy likely would make us generate more than we need
	+ Risks different based on how much we buy
		- Smaller amount in PPA is a smaller financial risk
		- Increasing the PPA amount increase the amount of financial risk
* Solar PPA would better overlap with our energy use profile
	+ Peak on hot, sunny days
	+ Generation during daytime