Victor J. Donnay* (vdonnay@brynmawr.edu), Math Dept, Bryn Mawr College, 101 N. Merion Ave, Bryn Mawr, PA 19010. Using Renewable Energy Data to Introduce Integration.

Many of our campuses are making investments in solar or wind energy systems. The data from these systems is often displayed in real time via the internet. We will show how this power data can be used to motivate the introduction of integration and lead in a natural way to numerical integration and Riemann sums. This example is one of many arising in a course on Math Modeling and Sustainability in which fundamental mathematical concepts are taught in an engaging way by linking to issues of sustainability. (Received September 14, 2020)