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EPA-RTP
On-Site Renewable Energy

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Solar PV

- Main Campus Roadway Lights (2002)
- NCC Roof (75kW)- Offsets 5% Demand (2003)
- B Office Roof (55kW)- Offsets 50% Demand (2010)
- FEELC Roof (109kW)- Power to Grid (2010)
  - Part of Duke Energy's NC REPS of 12.5% by 2021
- E Office Roof (55kW)- Offsets 30% Demand (2011)

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NCC
Flat Crystalline Panels-Flat Roof

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FEELC
Flat Crystalline Panels-Sloped Roof

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E Office
Thin-Film Crystalline Panels-Flat Roof

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Solar PV

- 268,307 kWh Generated in 2010
- Equivalent to 25 Average NC Residence's Consumption
- $10K Utility Savings
- Avoided 150,865 tons $CO_{2(eq)}$
  - ¼ Empire State Center Volume

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B Office

Angled Crystalline Panels (10°)-Flat Roof

- Completed April 2010
- Estimated 67,412 kWh per Year
- 252 panels 210 W Panels, 59”x39”
- Offset B Admin Power (Lighting and Plug Load)

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B Office
Annual Energy Consumption

	Load (kWh)	PV (kWh)	Total (kWh)	% PV
May-10	32,427	7,278	39,705	18%
Jun-10	34,173	8,008	42,181	19%
Jul-10	32,311	7,652	39,963	19%
Aug-10	35,142	6,874	42,016	16%
Sep-10	33,801	6,440	40,241	16%
Oct-10	34,706	6,003	40,709	15%
Nov-10	40,981	4,237	45,218	9%
Dec-10	43,195	2,949	46,144	6%
Jan-11	43,532	3,020	46,552	6%
Feb-11	39,049	4,575	43,624	10%
Mar-11	43,363	5,441	48,804	11%
Apr-11	38,292	6,850	45,142	15%
	450,972	**69,327**	**520,299**	**14%**

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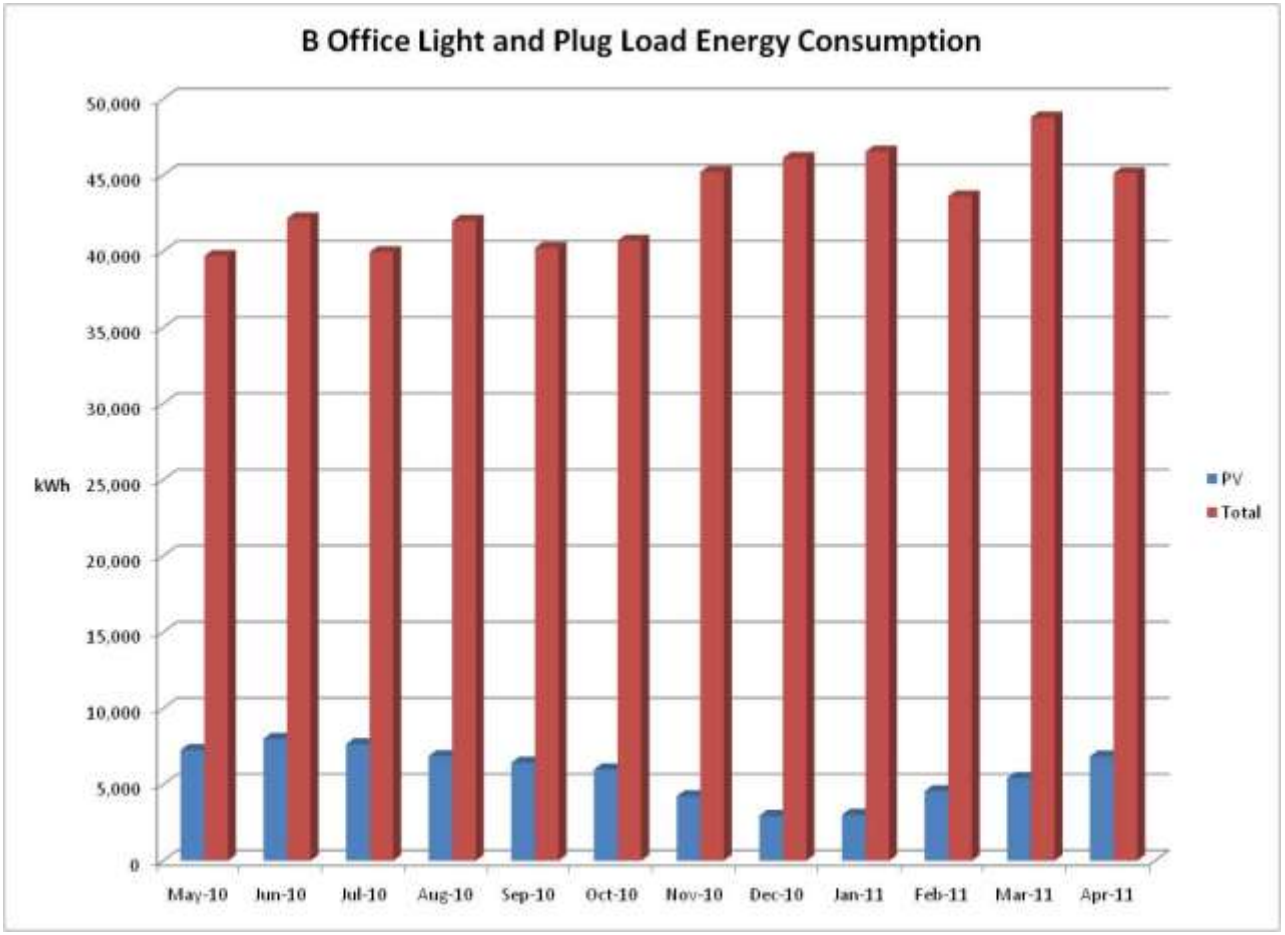
B Office Annual Energy Profile



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B Office Demand Profile