



***Net-Metering &
Interconnection Report
2011-13***

Bureau of Technical Utility Services

Policy & Planning Section

I. Background

The Alternative Energy Portfolio Standards (AEPS) Act of 2004 (Act) requires electric distribution companies (EDCs) and electric generation suppliers (EGSs) to supply 18 percent of electricity using alternative energy resources by 2021.¹ The percentage of Tier I, Tier II and solar alternative energy credits that must be included in sales to retail customers gradually increases over this period. To facilitate achieving this standard, the AEPS also required the PUC to develop technical and net metering interconnection rules for customer generators. The regulations established by the PUC require electric distribution EDCs and EGSs to submit annual reports to the Commission.²

This report contains the number of customer-generators interconnected to the EDC's distribution system as well as the status of interconnection requests processed by the EDC within the past year. It summarizes and provides access to the data submitted by each EDC for the previous three years. All reported data is by energy year, which runs from June 1 through May 31. Table 1 summarizes the cumulative number of interconnected customers to date, arranged by AEPS resource Tier. Section IV reflects the number of customer-generators³ in each EDC service territory. Section V shows the estimated generation capacity interconnected, by AEPS resource Tier, by year and by EDC. Section VI illustrates the number of annual interconnection requests received by year, by level of interconnection and by EDC. Section VII show the number of approved interconnection requests by year, by level of interconnection and by EDC.

II. Interconnection Levels

EDCs are required to review interconnection requests using one or more of the following four review procedures.⁴

Level 1 is used for inverter-based small generator facilities with a nameplate capacity of 10 kilowatts (kW) or less and the customer's interconnection equipment is certified.⁵

Level 2 is used for small generation facilities with a nameplate capacity of 5 megawatts (MW) or less when the following conditions exist:

- The small generator facility uses an inverter for interconnection and the interconnection equipment is certified.
- The proposed interconnection is to a radial distribution circuit, or a spot network limited to serving one customer.

¹ See generally 73 P.S. § 1648.1 *et seq.* and also [52 Pa Code §75](#)

² See [52 Pa Code §75.13\(g\)](#)

³ See [52 Pa Code §75.1](#)

⁴ See [52 Pa. Code § 75.34](#)

⁵ See [52 Pa Code §75.22](#)

- The small generator facility was reviewed under Level 1 review procedures but was not approved for interconnection at that level.

Level 3 is used for evaluating interconnection requests to connect small generation facilities with an electric nameplate capacity of 5 MW or less which do not qualify under Level 1 or Level 2 or that were reviewed under Level 1 or Level 2, but were not approved for interconnection at those levels.

Level 4 is used for interconnection customers that do not qualify for Level 1 or Level 2 and do not export power beyond the point of common coupling. Customers may request to be evaluated under Level 4 review procedures, which provide for a potentially expedited review.

III. Summary of Customers Interconnected: 2011-13

TABLE 1: SUMMARY OF CUSTOMERS INTERCONNECTED 2011-13

	Data as of May 31, 2011 (2010 AEPS Annual Report)				Data as of May 31, 2012 (2011 AEPS Annual Report)				Data as of May 31, 2013 (2012 AEPS Annual Report)			
	Tier I		Tier II	Total	Tier I		Tier II	Total	Tier I		Tier II	Total
	Total	Solar PV			Total	Solar PV			Total	Solar PV		
Number of Customer Generators	4,435	4,210	7	4,442	6,953	6,667	18	6,971	7,595	7,327	12	7,607
Estimated Generation Nameplate Capacity in kW	75,397	71,780	8,481	83,878	152,293	146,156	15,198	167,491	172,911	158,381	13,433	186,344

*Solar PV is a Tier I resource. The Solar PV column separately identifies the Solar PV component of Tier I.

Number of Customer-Generators by EDC Service Territory: 2011-13

TABLE 2A: NUMBER OF CUSTOMER-GENERATORS BY EDC SERVICE TERRITORY 2013

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Total
Tier I	408	21	194	72	1,384	368	53	2,034	4	3,048	9	7,595
Solar PV	370	21	176	66	1,360	348	44	2,022	4	2,913	3	7,327
Tier II	0	0	0	0	2	3	0	7	0	0	0	12
Total	408	21	194	72	1,386	371	53	2,041	4	3,048	9	7,607

*Solar PV is a Tier I resource. The Solar PV column separately identifies the Solar PV component of Tier I.

TABLE 2B: NUMBER OF CUSTOMER-GENERATORS BY EDC SERVICE TERRITORY 2012

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Total
Tier I	346	19	152	66	1,274	312	42	1,934	0	2,799	9	6,953
Solar PV	308	19	135	60	1,250	265	36	1,924	0	2,667	3	6,667
Tier II	1	0	0	0	3	3	2	9	0	0	0	18
Total	347	19	152	66	1,277	315	44	1,943	0	2,799	9	6,971

*Solar PV is a Tier I resource. The Solar PV column separately identifies the Solar PV component of Tier I

TABLE 2C: NUMBER OF CUSTOMER-GENERATORS BY EDC SERVICE TERRITORY 2011

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Total
Tier I	250	14	96	45	717	149	31	1,452	3	1,669	9	4,435
Solar PV	214	14	79	39	691	106	13	1,444	3	1,604	3	4,210
Tier II	1	0	0	0	1	0	0	5	0	0	0	7
Total	251	14	96	45	718	149	31	1,457	3	1,669	9	4,442

*Solar PV is a Tier I resource. The Solar PV column separately identifies the Solar PV component of Tier I

Figure 1a: Number of Customer-Generators by EDC Service Territory: 2013

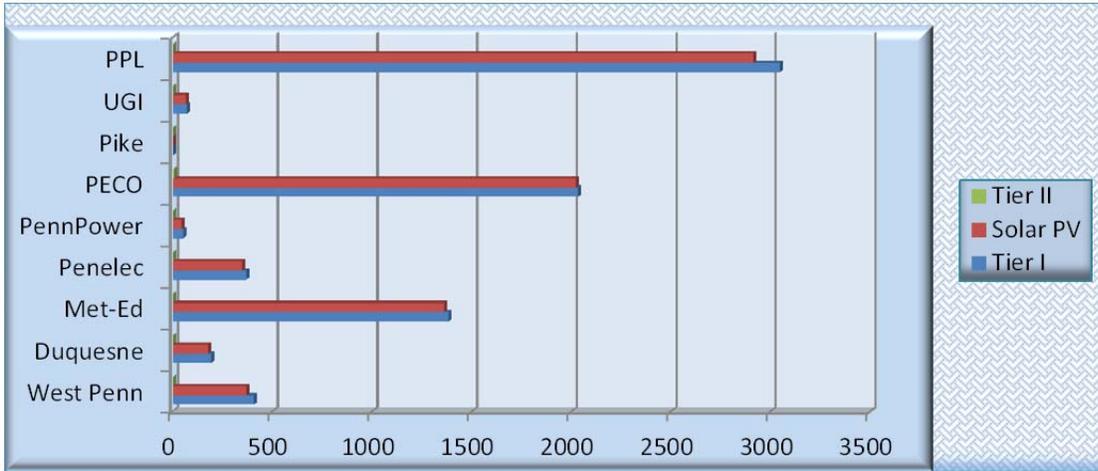


Figure 1b: Number of Customer-Generators by EDC Service Territory: 2012

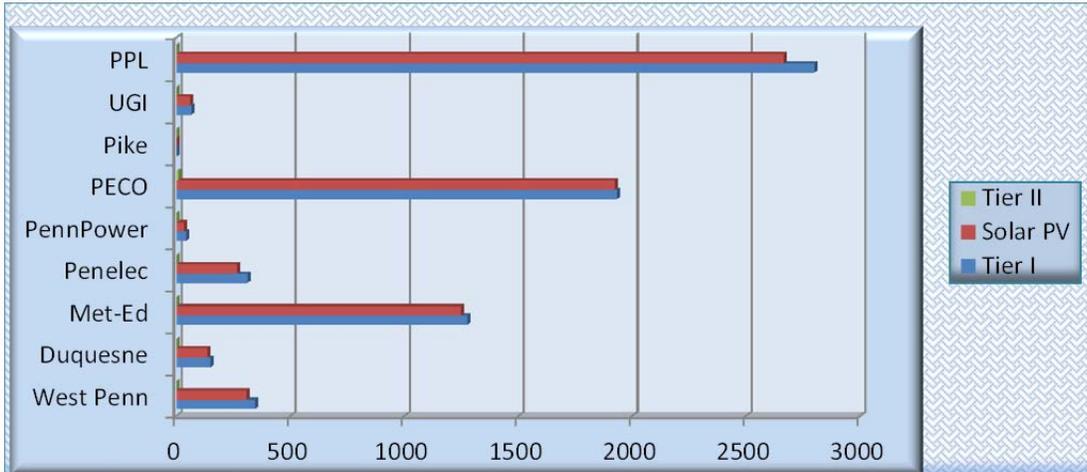
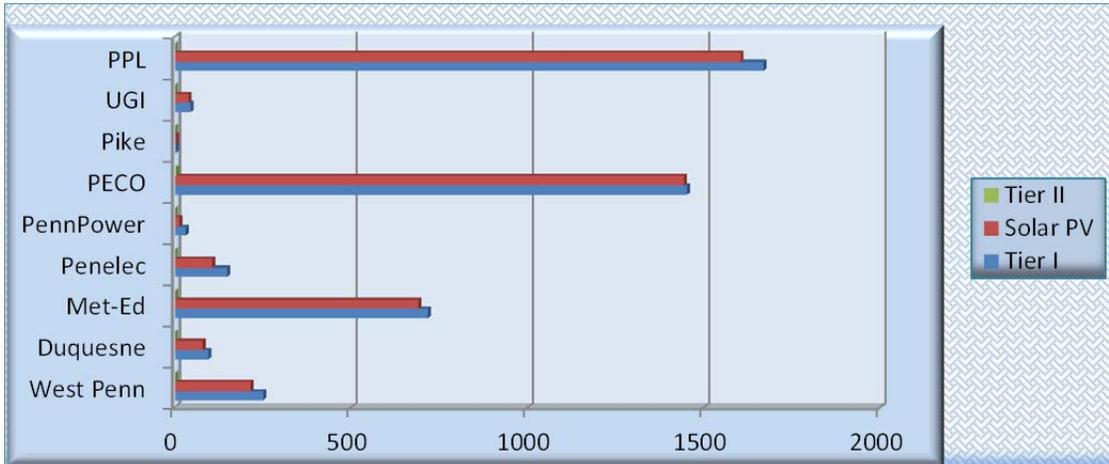


Figure 1c: Number of Customer-Generators by EDC Service Territory: 2011



IV. Estimated Generation Capacity by EDC Service Territory (kW): 2011-13

TABLE 3A: ESTIMATED GENERATION NAMEPLATE CAPACITY BY EDC SERVICE TERRITORY (KW) 2013

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Total
Tier I	4,770	640	4,188	839	31,612	5,109	1,179	43,464	42	81,031	38	172,911
Solar PV	4,667	640	4,031	820	31,430	4,199	442	42,735	42	69,359	17	158,381
Tier II	0	0	0	0	3	2,945	0	10,485	0	0	0	13,433
Total	4,770	640	4,188	839	31,615	8,054	1,179	53,949	42	81,031	38	186,344

*Solar PV is a Tier I resource. The Solar PV column separately identifies the Solar PV component of Tier

TABLE 3B: ESTIMATED GENERATION NAMEPLATE CAPACITY BY EDC SERVICE TERRITORY (KW) 2012

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Total
Tier I	4,154	626	1,455	805	29,970	4,059	459	37,702	0	73,026	37	152,293
Solar PV	4,051	0	1,300	785.8	29,788	3,334	373	37,660	0	68,847	17	146,156
Tier II	5	0	0	0	1,103	2,945	650	10,495	0	0	0	15,198
Total	4,159	626	1,455	805	31,073	7,004	1109	48,197	0	73,026	37	167,491

*Solar PV is a Tier I resource. The Solar PV column separately identifies the Solar PV component of Tier I

TABLE 3C: ESTIMATED GENERATION NAMEPLATE CAPACITY BY EDC SERVICE TERRITORY (KW) 2011

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Total
Tier I	2,835	548	784	468	19,064	1,797	808	25,684	44	23,327	38	75,397
Solar PV	2,737	548	662	449	17,769	992	134	25,649	44	22,780	17	71,780
Tier II	5	0	0	0	1	0	0	8,475	0	0	0	8,481
Total	2,840	548	784	468	19,065	1,797	808	34,159	44	23,327	38	83,878

*Solar PV is a Tier I resource. The Solar PV column separately identifies the Solar PV component of Tier I.

Figure 2a: Estimated Generation Capacity by EDC Service Territory (kW) 2013

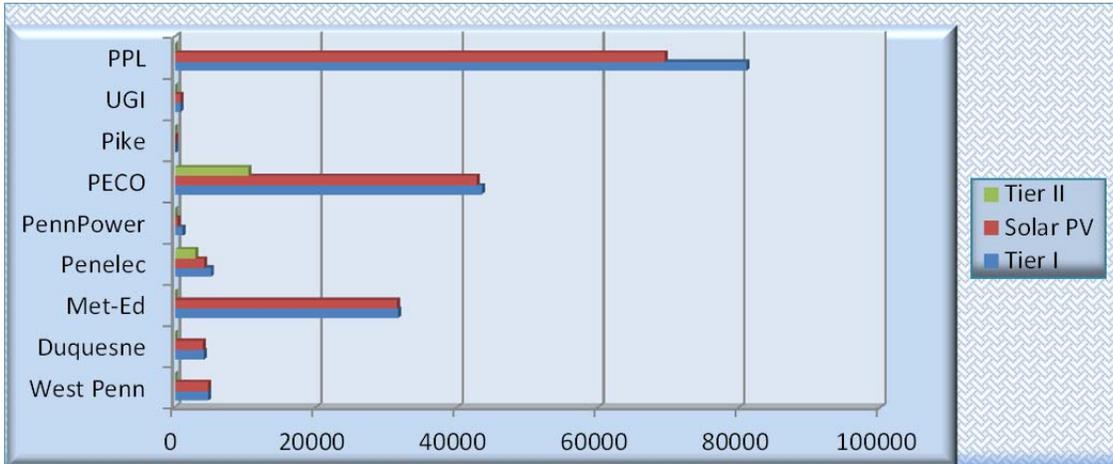


Figure 2b Estimated Generation Capacity by EDC Service Territory (kW) 2012

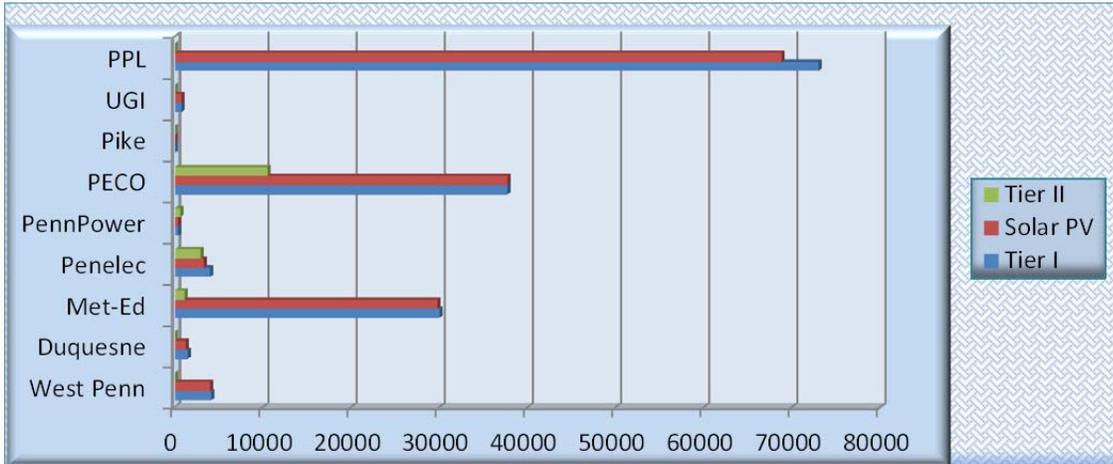
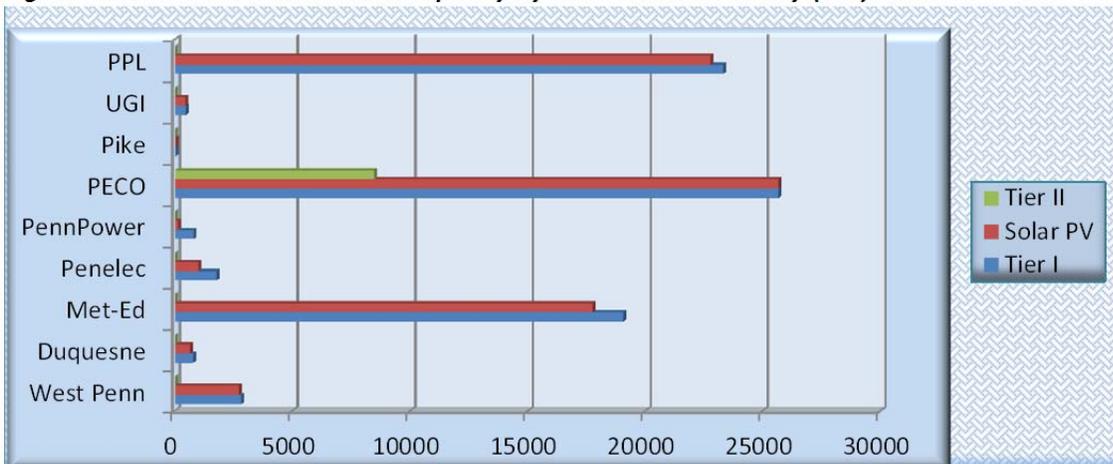


Figure 2c: Estimated Generation Capacity by EDC Service Territory (kW) 2011



V. Interconnection Requests by EDC Service Territory: 2011-2013

TABLE 4A: NUMBER OF INTERCONNECTION REQUESTS BY EDC SERVICE TERRITORY 2013

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Total
Level I	49	3	46	6	107	30	7	251	0	189	0	688
Level II	17	0	19	0	0	13	2	40	0	60	0	151
Level III	0	0	0	0	0	0	0	1	0	0	0	1
Level IV	0	0	0	0	0	0	0	1	0	0	0	1
Total	66	3	65	6	107	43	9	293	0	249	0	841

TABLE 4B: NUMBER OF INTERCONNECTION REQUESTS BY EDC SERVICE TERRITORY 2012

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Total
Level I	48	5	41	13	180	200	7	311	0	626	0	1,431
Level II	12	0	7	8	76	29	5	111	0	242	0	490
Level III	0	0	0	0	1	1	0	8	0	0	0	10
Level IV	0	0	0	0	0	1	0	3	0	0	0	4
Total	60	5	48	21	257	231	12	433	0	868	0	1,935

TABLE 4C: NUMBER OF INTERCONNECTION REQUESTS BY EDC SERVICE TERRITORY 2011

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Total
Level I	138	6	60	19	568	98	12	841	2	1,071	0	2,815
Level II	29	2	10	7	126	22	1	222	1	314	0	734
Level III	0	0	0	0	2	4	0	8	0	0	0	14
Level IV	0	0	0	0	2	0	0	3	0	0	0	5
Total	167	8	70	26	698	124	13	1,074	3	1,385	0	3,568

Figure 3a: Number of Interconnection Requests by EDC Service Territory 2013

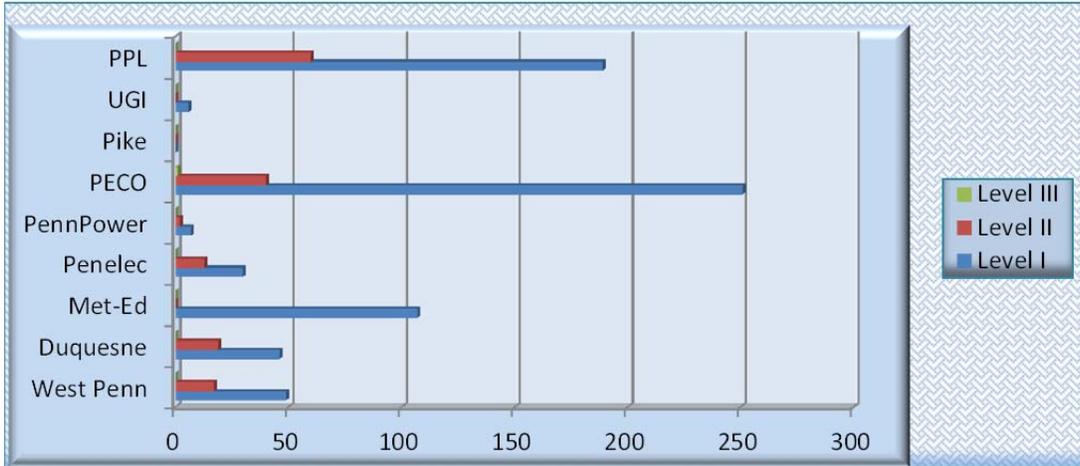


Figure 3b: Number of Interconnection Requests by EDC Service Territory 2012

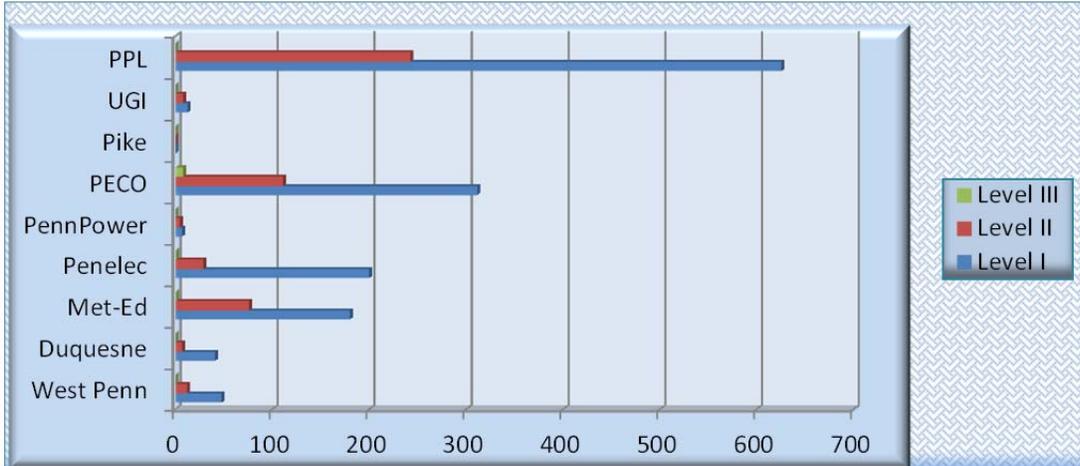
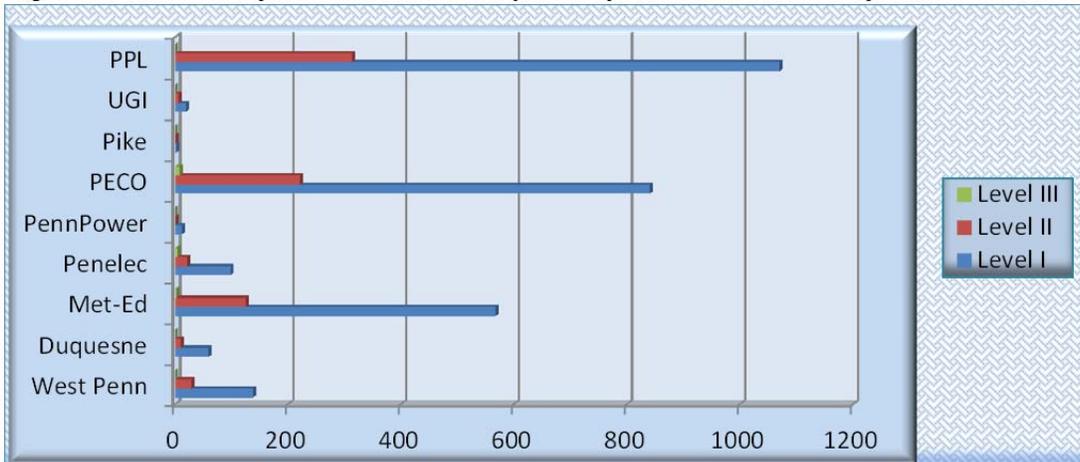


Figure 3c: Number of Interconnection Requests by EDC Service Territory 2011



**VI. Mean Number of Days to Complete Interconnection Request Approvals:
2011-13**

TABLE 5A: MEAN NUMBER OF DAYS TO COMPLETE INTERCONNECTION REQUEST APPROVALS BY EDC SERVICE TERRITORY 2013

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Mean
Level I	5	2	2.41	3	11	15	5	4	0	7	0	6
Level II	5	0	5.26	0	22	24	5	6	0	7	0	11
Level III	0	0	0	0	0	0	0	18	0	0	0	18
Level IV	0	0	0	0	0	0	0	11	0	0	0	11

TABLE 5B: MEAN NUMBER OF DAYS TO COMPLETE INTERCONNECTION REQUEST APPROVALS BY EDC SERVICE TERRITORY 2012

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Mean
Level I	38	2	2.78	4	65	19	26	7	0	7	0	19
Level II	62	0	2.86	5	73	77	59	14	0	7	0	38
Level III	0	0	0	0	0	0	0	5	0	0	0	5
Level IV	0	0	0	0	0	0	0	5	0	0	0	5

TABLE 5C: MEAN NUMBER OF DAYS TO COMPLETE INTERCONNECTION REQUEST APPROVALS BY EDC SERVICE TERRITORY 2011

Resource	West Penn	Citizens	DQE	UGI	Met-Ed	Penelec	Penn Power	PECO	Pike	PPL	Wellsboro	Mean
Level I	6	1	3	5	0	15	15	10	3.5	7	0	7
Level II	11	4	4	5	0	15	15	16	5	7	0	9
Level III	0	0	0	0	0	0	0	20	0	0	0	20
Level IV	0	0	0	0	0	0	0	13	0	0	0	13

Figure 4a: Mean Number of Days - Interconnection Request Approvals 2013

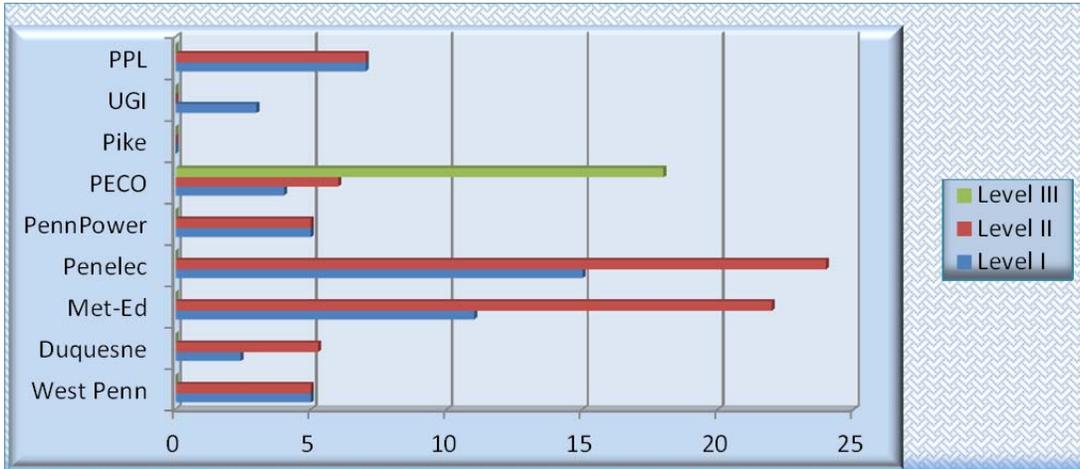


Figure 4b Mean Number of Days - Interconnection Request Approvals 2012

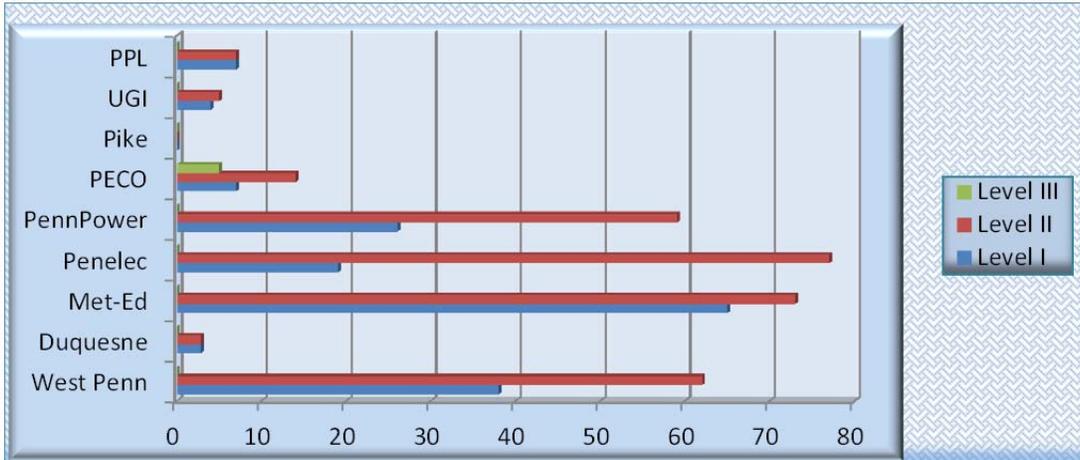


Figure 4c: Mean Number of Days - Interconnection Request Approvals 2011

