PJM Interconnection Queue Status & Statistics Update
Database Snapshot on 05/27/2015

Presented by David Egan
Manager, Interconnection Projects

Presented to PJM Planning Committee
June 11, 2015
Energy MWs that Entered the Queue

MW

Queue

Y2 Y3 Z1 Z2 AA1 AA2

Other Storage Nuclear Coal Solar Wind Natural Gas
A→AA2 Queue Phase Progression Totals

Generation Progress Progression - All Projects
*Excludes Active Projects*

**Number of Projects**
- Requests for New Project, 2,487
- Feasibility Studies Issued, 2,277
- Impact Studies Issued, 1,681
- Facility Studies Issued, 1,343
- Executed Agreement, 836
- In Service, 581

89 projects with ISAs and 110 projects with WMPAs withdrew after agreement was fully executed.

23% went into service

**MW Capacity**
- Requests for New Project, 296,474
- Feasibility Studies Issued, 260,800
- Impact Studies Issued, 136,794
- Facility Studies Issued, 91,665
- Executed Agreement, 52,589
- In Service, 31,872

15046 MWC with ISAs and 350 MWC with WMPAs withdrew after agreement was fully executed.

11% went into service
A→AA2 Queue Phase Progression Totals

Generation Progress Progression - Large Generation Projects
*Excludes Active Projects*

**Number of Projects**
- Requests for New Project, 1,083
- Feasibility Studies Issued, 997
- Impact Studies Issued, 655
- Facility Studies Issued, 463
- Executed Agreement, 283
- In Service, 201

65 projects with ISAs and 1 project with WMPAs withdrew after agreement was fully executed.
19% went into service

**MW Capacity**
- Requests for New Project, 288,868
- Feasibility Studies Issued, 253,668
- Impact Studies Issued, 131,090
- Facility Studies Issued, 86,795
- Executed Agreement, 49,149
- In Service, 29,159

14844MWC with ISAs and 0 MWC with WMPAs withdrew after agreement was fully executed.
10% went into service
Generation Progress Progression - Small Generation Projects

Excludes Active Projects

Number of Projects

- Requests for New Project, 1,404
- Feasibility Studies Issued, 1,280
- Impact Studies Issued, 1,026
- Facility Studies Issued, 880
- Executed Agreement, 553
- In Service, 380

24 projects with ISAs and 109 projects with WMPAs withdrew after agreement was fully executed.

27% went into service

MW Capacity

- Requests for New Project, 7,606
- Feasibility Studies Issued, 7,132
- Impact Studies Issued, 5,704
- Facility Studies Issued, 4,870
- Executed Agreement, 3,440
- In Service, 2,713

202MWC with ISAs and 350 MWC with WMPAs withdrew after agreement was fully executed.

36% went into service
A→AA2 Queue Phase Progression Totals

Generation Progress Progression - New Generation Facilities

*Excludes Active Projects*

<table>
<thead>
<tr>
<th>Number of Projects</th>
<th>MW Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requests for New Project, 1,990</td>
<td>Requests for New Project, 267,271</td>
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<tr>
<td>Feasibility Studies Issued, 1,802</td>
<td>Feasibility Studies Issued, 233,644</td>
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<tr>
<td>Impact Studies Issued, 1,278</td>
<td>Impact Studies Issued, 117,705</td>
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<tr>
<td>Facility Studies Issued, 957</td>
<td>Facility Studies Issued, 74,027</td>
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<tr>
<td>Executed Agreement, 500</td>
<td>Executed Agreement, 38,062</td>
</tr>
<tr>
<td>In Service, 296</td>
<td>In Service, 20,004</td>
</tr>
</tbody>
</table>

72 projects with ISAs and 110 projects with WMPAs withdrew after agreement was fully executed. 15% went into service.

14331MWC with ISAs and 350 MWC with WMPAs withdrew after agreement was fully executed. 7% went into service.
Generation Progress Progression - Uprates to Existing Facilities

*Excludes Active Projects*

**Number of Projects**
- Requests for New Project, 497
- Feasibility Studies Issued, 475
- Impact Studies Issued, 403
- Facility Studies Issued, 388
- Executed Agreement, 336
- In Service, 285

**MW Capacity**
- Requests for New Project, 29,203
- Feasibility Studies Issued, 27,156
- Impact Studies Issued, 19,089
- Facility Studies Issued, 17,638
- Executed Agreement, 14,527
- In Service, 11,868

- 17 projects with ISAs and 0 projects with WMPAs withdrew after agreement was fully executed.
- 57% went into service.

- 715MWC with ISAs and 0 MWC with WMPAs withdrew after agreement was fully executed.
- 41% went into service.
MW Capacity in PJM Queue

Project Phase

Feasibility  | System Impact | Facilities | Final Agreement
---|---|---|---
0 | 8,000 | 12,000 | 2,000
2,000 | 6,000 | 14,000 | 4,000
4,000 | 4,000 | 16,000 | 6,000
6,000 | 2,000 | 16,000 | 8,000
8,000 | 0 | 14,000 | 10,000
10,000 | 0 | 12,000 | 12,000
12,000 | 0 | 10,000 | 14,000
14,000 | 0 | 8,000 | 16,000
16,000 | 0 | 6,000 | 14,000

Agreement | Study
---|---

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Active Studies

Number of Projects in PJM Queue

<table>
<thead>
<tr>
<th>Project Phase</th>
<th>Number of Projects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Feasibility</td>
<td>140</td>
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<tr>
<td>System Impact</td>
<td>80</td>
</tr>
<tr>
<td>Facilities</td>
<td>120</td>
</tr>
<tr>
<td>Final Agreement</td>
<td>60</td>
</tr>
</tbody>
</table>

- **Agreement**
- **Study**
Number of Projects in Feasibility Study

Transmission Owner

- AEC
- AEP
- APS
- ATSI
- BGE
- ComEd
- Dayton
- DEOK
- DL
- Dominion
- DPL
- JCPL
- ME
- PECO
- Penlec
- PPL
- PSEG

Backlog vs. Active Projects

0 5 10 15 20 25
Number of Projects
Number of Projects in System Impact Study

Transmission Owner

- AEC
- AEP
- APS
- ATSI
- BGE
- ComEd
- Dayton
- DEOK
- DL
- Dominion
- DPL
- JCPL
- ME
- PECO
- Penelec
- PPL
- PSEG

Number of Projects

- Backlog
- Active
Number of Projects in Facilities Study

Transmission Owner

- AEC
- AEP
- APS
- ATSI
- BGE
- ComEd
- Dayton
- DEOK
- DL
- Dominion
- DPL
- JCPL
- ME
- PECO
- Penelco
- PPL
- PSEG

Number of Projects

- Backlog
- Active
MW Capacity In Queue
Active, Under Construction, or Suspended

- Natural Gas, 50,453
- Coal, 1,837
- Solar, 1,761
- Nuclear, 2,000
- Wind, 2,118
- Storage, 32
- Other, 1,138
Number of Projects In Queue
Active, Under Construction, or Suspended

- Natural Gas, 191
- Solar, 207
- Wind, 85
- Storage, 49
- Other, 46
- Coal, 8
- Nuclear, 6
Histogram of Active Projects by MW Capacity

- 0.5 MW: 8 applications
- 5-10 MW: 36 applications
- 10-15 MW: 27 applications
- 15-20 MW: 37 applications
- 20-50 MW: 45 applications
- 50-100 MW: 29 applications
- 100-500 MW: 24 applications
- 500-1000 MW: 26 applications
- 1000+ MW: 8 applications
Percentage of Applications Received in Last Month of Queue

Queue

% of Applications in Queue

- Week 2-4
- Last Week

Requests in Last Month of Queues
Requests in AA2 Queue

Applications by Days Before Queue Close, Last Queue

Number of Applications

Days before Queue Close

91+ days | 61-90 days | 31-60 days | 0-30 days

New Application | MTx | LTF | ARR | Large Gen | Small Gen

[Bar chart showing the number of applications by days before queue close]