Subject Matter of the Exam

1. Content Outlines
The results of a Job Analysis have determined that there are two discrete sets of tasks performed by operators in the PJM RTO systems.

- A Generation Content Outline details the common tasks performed by the operators who dispatch generation resources and perform other generation-related real time duties.
- A Transmission Content Outline details the common tasks performed by operators who operate transmission facilities and perform other transmission-related real time duties.

The content outlines serve as the basis for the certification exams. There are two examinations: the PJM Generation Certification Exam and the PJM Transmission Certification Exam. Each question on the exam must link to a particular task found on the relevant Content Outline.

### Generation

<table>
<thead>
<tr>
<th>Section</th>
<th># of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. Generation Control &amp; Performance</td>
<td>35</td>
</tr>
<tr>
<td>II. Emergency Operations</td>
<td>25</td>
</tr>
<tr>
<td>III. Operations Planning &amp; Scheduling</td>
<td>15</td>
</tr>
<tr>
<td>IV. Computer/Telecommunications Systems</td>
<td>5</td>
</tr>
<tr>
<td>V. Reporting</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

### Transmission

<table>
<thead>
<tr>
<th>Section</th>
<th># of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. System Reliability Coordination</td>
<td>40</td>
</tr>
<tr>
<td>II. Emergency Operations</td>
<td>35</td>
</tr>
<tr>
<td>III. Operations Planning &amp; Scheduling</td>
<td>5</td>
</tr>
<tr>
<td>IV. Computer/Telecommunications Systems</td>
<td>5</td>
</tr>
<tr>
<td>V. Reporting</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>90</strong></td>
</tr>
</tbody>
</table>

To access the detailed Content Outlines, please visit:
http://pjm.com/training/certification/sys-op-cert.aspx

2. Resource Documents
The exams are based on the following:

**PJM Manuals (versions in effect February, 2011)**
Control Center Requirements, M-01
Candidate Bulletin PJM Operator Certification Program

Transmission Operations, Manual M-03
Pre-Scheduling Operations, M-10
Scheduling Operations, M-11
Dispatching Operations, M-12
Emergency Operations, Manual M-13
Generator Operational Requirements, M-14D
System Restoration, M-36
Reliability Coordination, M-37
Certification and Training Requirements, M-40

Versions of the Manuals in effect February 2011, can be found on the PJM Operator Certification webpage: [http://pjm.com/training/certification/sys-op-cert.aspx](http://pjm.com/training/certification/sys-op-cert.aspx)

**Additional Resources**
For additional resources, please review relevant PJM training course materials including: Generation 101, 201, 301 Operations 101, Fundamentals of Transmission Operations (FOTO) and various System Restoration courses.

**Sample Exams**
A Generation and a Transmission sample exam can be found on the PJM Operator Certification webpage. These sample exams contain items that illustrate the range of questions addressed by each exam. To access the sample exams, visit: [http://pjm.com/training/certification/sys-op-cert.aspx](http://pjm.com/training/certification/sys-op-cert.aspx)

**How to Apply**

PJM has partnered with the NERC System Operator Certification Program to facilitate the application and scheduling process. Electronic application for a PJM certification exam is a two-step process: applying for the certification exam and scheduling an exam date.

1. **Applying for the Certification Exam**

   **Online Application**
The application for the PJM Operator Certification Examination can be accessed from the NERC System Operator Certification and Continuing Education Database (SOCCED): [https://socced.nerc.mcgware.com/Login.aspx](https://socced.nerc.mcgware.com/Login.aspx). A link to SOCCED is also provided on the PJM Operator Certification page of [www.pjm.com](http://www.pjm.com).

   If you do not already have an account for this system, you must first establish one. If you already have a user account, sign-in to your account to access the application.

   - When creating an account, enter your name **exactly** as it appears on your primary form of identification. Acceptable forms of identification include: driver’s license, passport or military ID with both picture and signature.
Create a user ID and password for the system.
  - Once your Account Registration is submitted, your account is immediately available. To access your account, select the Login button.

To access the PJM Certification Exam Application:
  - Login to the SOCCED system.
  - Select the Request Eligibility Number menu option.
  - Verify your contact information.
  - Use the drop-down menu to select your exam. Please be sure to select one of the two available PJM exams.
  - Select your method of payment: credit card (Visa or Master Card only) or check. Cash will not be accepted.
    - If paying by check, mail the check and printed page to:
      North American Electric Reliability Corporation
      3353 Peachtree Road NE
      Suite 600, North Tower
      Atlanta, GA 30326

If you have any technical questions or concerns regarding NERC’s SOCCED database, or if you have forgotten your user ID and/or password, contact the NERC office.

Exam Fees

<table>
<thead>
<tr>
<th>Item</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application for Exam</td>
<td>$150</td>
</tr>
<tr>
<td>Re-Test</td>
<td>$150</td>
</tr>
<tr>
<td>Change Exam Date or Cancel Exam</td>
<td>$35</td>
</tr>
<tr>
<td>Withdrawal</td>
<td>$50</td>
</tr>
<tr>
<td>Bad Check/Credit Application</td>
<td>$25</td>
</tr>
</tbody>
</table>

Note: All funds shall be payable in U.S. dollars.

Processing of Applications
Applications are accepted year round. Allow up to two weeks for the processing of your application and receipt of notification that you are approved to take an exam.

An application is complete and processed only when all required information is provided and fees are received. Incomplete applications will be returned to the Candidate with an explanation as to why the application was returned.

Once your application has been approved, you will receive a scheduling request from the test administrator (PSI).
Eligibility Period
Eligibility to take the examination remains in effect for one year from the date the Authorization to Test number is issued. Candidates are encouraged to schedule an appointment to sit for the examination promptly. If a Candidate fails to schedule and take the examination during the one year eligibility period, the Candidate shall forfeit all payments made to NERC and must submit a new application and pay the full fee to be considered for eligibility again.

2. Scheduling an Exam Date
The PJM certification exams are available at PSI Testing Centers. After completing the application process and receiving your ATT number (as outlined above), you have two options for scheduling your exam date: internet scheduling and telephone scheduling. Refer to the PSI Candidate Bulletin for additional details.

Cancellations and No Shows
- You may cancel and reschedule an examination appointment without forfeiting your fee if your cancellation notice is received 2 days before the scheduled examination by 7 PM Eastern Time. Examination fees and non-refundable and nontransferable.
- A voice mail message is NOT an acceptable form of cancellation. Please use the telephone system and speak to a Customer Service Representative at PSI, or use the online system. Cancellation requests must be made directly with PSI.
- Your registration will be invalid and you will not be able to take the examination as scheduled, if you:
  - Do not cancel your appointment 2 days before the scheduled examination date;
  - Do not appear for your examination appointment;
  - Arrive after the examination start time;
  - Do not present proper identification when you arrive for the examination.

Examination Change Request
If a Candidate wishes to change the PJM examination that they are registered to take, they must contact NERC at least 30 days prior to the expiration of the Candidate's eligibility period. The Candidate will be provided with a new Candidate Authorization Number.

Special Accommodations Arrangement
All examination centers are equipped to provide access in accordance with the Americans with Disabilities Act (ADA) of 1990, and every reasonable accommodation will be made in meeting a candidate’s needs. Applicants with disabilities must obtain pre-approval from PJM for any accommodations. Disability requests must be supported by a letter (original copy) from a recognized health care provider and be signed by a licensed physician or psychologist. All other requests must be similarly supported. PJM will review each request and for those approved will ensure appropriate accommodations are provided.
Examination Process

Day of the Examination

Check-in
Plan to arrive at the PSI Testing Center at least 30 minutes early to check in. Candidates arriving late to the exam may not be admitted to the exam site.

1. Identification
You will be required to show the following items before being admitted to the Examination:

   - Two forms of identification:
     - Acceptable forms of primary IDs
       - Driver’s license, passport or military ID with a current photo and signature
       - The Candidate’s name on the document must match the NERC Authorization to Test information
     - Acceptable forms of secondary IDs
       - Employer’s ID card, Credit Card or Debit Card with either the Candidate’s signature or recent photo

   Candidates unable to provide the identification documents will not be admitted to the examination.

2. Testing Center Regulations
   - No reference materials, calculators, or recording equipment may be taken into the examination.
   - No test materials, documents, notes, or scratch paper of any sort may be taken from the examination.
   - No personal items should be brought to the testing centers. PSI will not be responsible for any personal items, and suggests that you leave such items in another safe place of your choosing.
   - Visitors will not be permitted during the examination.
   - Testing Center staff is instructed to only answer questions about testing procedures. They cannot respond to inquiries regarding the examination content.
   - Candidates may not leave the testing center until they have finished the examination.
   - Any candidate giving or receiving assistance, or making a disturbance, will be required to turn in their examination materials, exit the examination room, and leave the Testing Center.
   - PJM will not score the examination results or refund any fee to a candidate who violates security guidelines, or attempts to impersonate another candidate.
Examination Components & Timing

<table>
<thead>
<tr>
<th>EXAMINATION TIME ALLOCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Examination Stages</td>
</tr>
<tr>
<td>Administration &amp; Review of Candidate Identification</td>
</tr>
<tr>
<td>Examination</td>
</tr>
<tr>
<td>Post-Examination Exit Survey</td>
</tr>
<tr>
<td><strong>Total Time to be Allocated:</strong></td>
</tr>
</tbody>
</table>

Computer-Based Examination
A Candidate has a total of 2 hours and 45 minutes to complete the examination.

Each Exam will present the Candidate with a total of 110 objective, multiple-choice questions. Of these, 90 are “official” questions from the content areas listed below. Additionally, each exam contains 20 new and unofficial questions that are being piloted for possible future use. Please note that the Candidate will not be able to distinguish the “official” questions from the “pilot” questions.

Post Examination Exit Survey
At the completion of the examination, you will be invited to complete a brief questionnaire on your reactions to the exam experience and the quality of the Testing Center staff, services and facilities.

This is also your opportunity to comment on the content of the examination and to challenge any examination question(s) or answer(s). Since the order of the questions is randomized, you need to identify the content of the item or the answer of concern and what your concern is. Complaints and challenges can also be made according to the PJM Certification Dispute Policy. Policy information can be found at: http://pjm.com/training/certification/sys-op-cert.aspx.

Results and Awarding of Certificates
As soon as the candidate exits an examination, he/she will be provided with unofficial pass/fail results.

After grading and analysis of the exam results, an official summary will be mailed to the candidate. This is done between six and ten weeks after the exam. **If you have not received your certificate or score report within 10 weeks of taking the PJM exam, contact PJM.**
Candidates who pass an examination will receive the PJM Certified Operator certificate, noting the area of practice: Generation or Transmission. The date of the certificate will be the day the candidate took the examination. PJM certificates are value for three (3) years.

**Minimum Time between Examinations**
Candidates who fail an examination must re-apply to retake the examination but must wait 30 calendar days from the date of the failed exam to retest.

Candidates who have previously passed the PJM Certification Examination and intend to renew their certificate by retaking the exam may do so no sooner than 30 months after the date they were last certified.

**Confidentiality and Nondisclosure for the PJM Operator Certification Examinations**
The Candidate is expected to maintain the confidentiality of the content of PJM Operator Certification Examination. The Candidate must not disclose the examination questions in whole or in part to others, nor share with others the concepts and procedures that are the basis for the exam questions.

The value of the PJM Operator Certification credential is contingent on maintaining the security of the PJM Certification Examinations. Applying for a PJM Operator Certification Examination implies that the Candidate has read the PJM Candidate Bulletin in its entirety and agrees to conform with the above stated expectations.

A Candidate who shares examination questions with others for whatever reason reduces the value of the PJM Operator Certification credential as a measure of the operator’s capability to safely and reliably operate on the PJM system.

**Third Parties**
PJM will verify to Third Parties that an individual has successfully passed a PJM Certification Examination if the Third Party provides the name and address of the individual. No further information will be provided.