



**eTools Tech Refresh:
Business & Validation Rules Implemented in
InSchedule Application (Formally known as
eSchedules)
Version 1.0.4**

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Revision History

| Date | Version | Description | Author |
|------------|---------|---|---------------|
| 10/02/2012 | 1.0 | Initial Draft – Added Rules & Validation for Contracts & Schedules, Added Attachments. | Bhushan Dhuri |
| 11/05/2012 | 1.1 | Added Messages explanation section to document | Bhushan Dhuri |
| 12/11/2012 | 1.2 | Added Error Messages explanation for Find Contract button & one for File Upload module & reconciliation error. | Bhushan Dhuri |
| 05/20/2015 | 1.3 | General Rules (pg.7) – Updated submission of ‘0’ MW schedules across all hours, and the warning message associated. | Kevin Bonner |
| 07/20/2015 | 1.4 | Section 7 - Schedule Assistant Feature – Updated Peak Rules | Kevin Bonner |
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1. Overview/Summary

This document contains eSchedules specific Business and Validation Rules that are implemented in the new InSchedule application and describes the features available in the InSchedule application.

This document adheres to a data retention policy which will be in effective from 11/09/2012.

2. User Roles in CAM

There are two roles available in CAM for InSchedule application users,

Read Write Role - Allows user to view, create and modify contracts and schedules in the eSchedules application. **NOTE:** The eSchedules option in CAM will become InSchedule on November 10, 2012.

Read Only Role - Allows user to only view eSchedules application contents & allows downloading of available reports. **NOTE:** The eSchedules option in CAM will become InSchedule on November 10, 2012

3. Login Functionality

- All users must obtain valid user credentials with appropriate roles from their internal CAM.
- All users must accept PJM legal agreement on every log in.
- An audit trail will be maintained only for users accepting the legal notice.

4. Contracts

Creating New Contracts

- All contracts need to be created from the InSchedule application
- All fields are mandatory except the "Comments" field
- Stop date has to be equal to or later than the Start date.
- Start date cannot be earlier than the Last Business Day
- Start date has to be less than the last business day plus one year.

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- Buyer and Seller cannot be the same company
- One of the companies in Buyer or Seller must be the company of the user logged in.
- All the contracts must be confirmed by the Buyer and Seller.
- Any company can create contracts with one of the Confirmation types Dual, Buyer, or Seller.
- Pricing Day Ahead: This pricing type is only available to Internal Bilateral Transactions (Service Type).
- Real Time: This pricing type is available for all service types.
- The Source and Sink aggregates must be the identical if the services types are Generation, Wholesale Load Responsibility, or Retail Load Responsibility.
- The Source and Sink aggregates can be different for Internal Bilateral Transactions service
- Pnodes must have effective date less than or equal to contract start date.
- Pnode terminate date must be equal to or greater than contract start date.

Editing Contract

- Only the Stop date is allowed to be edited once a contract is created.
- To edit the Stop date the requester has to propose a new stop date. Once the proposed stop date is confirmed status changes from pending date it stop date.
- If New Stop Date is proposed by Company A, Company B has to confirm it. Proposed date becomes Stop date after confirmed by opposite party.
- If the Proposed stop date is earlier than the Confirmed Stop date any pending or confirmed schedules will be lost after new Stop date is confirmed.
- If the Proposed stop date is earlier than the Confirmed Stop date and no action has been performed prior to the deadline, the system will keep the proposed stop date as well as original Stop date. The system will deny accepting the proposed date and the user will be guided to choose new date. The opposite party needs to confirm that date now.

Revoking the Proposed Stop Date

- Revoking the Proposed Stop Date is possible only if counter party has not confirmed the new stop date that the user has proposed
- Audit trail will be maintained when the New Stop Date is proposed and whenever it's revoked.

Terminating a Contract

- Contracts once created cannot be deleted. Companies are suggested to change the Stop date to current date and let the contract expire. Both companies need to accept the new stop date.

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Confirming Contract

- Every contract needs to be confirmed to act as an active contract.
- Confirming company user needs to open the pending contract and click 'Confirm' on the Contract Details page.
- First and Last name of the user confirming the contract will be recorded and displayed with date and time stamp.
- Contracts which have a 'Stop Confirmed date' falling earlier than current date will be considered as 'Expired Contract'.

5. Schedules

General Rules

- Schedules can be uploaded via File Uploads module in InSchedule application, within the Edit Schedule module and browserless file uploads.
- User cannot upload the schedule beyond the Confirmed Stop Date. (Note: Only exception is where contract type is Dual and company that has proposed new date beyond stop date to extend the contract.)
- Any schedule once uploaded cannot be deleted. Users need to update the schedule with 0 MWh values if they do not want that schedule (Note: Schedule Confirmation Type rules applies).
- Users can upload schedules that are within the Last Business Day plus one year or Stop Confirmed Date whichever is earlier.
- First and Last name of the user creating, updating, and confirming the schedule will be recorded and displayed with date and time stamp.
- Users cannot upload schedules for any date before the Last Business day.
- Users **can** insert an initial schedule with 0MWh for all hours. This is true for any schedule insert method which includes file upload, browserless upload, and entering schedules through the InSchedule application UI. A warning message will be displayed to the user when submitting the schedule - *"Warning: <Contract ID> with schedule date of <date> was submitted with all zeroes"*. This warning message will only occur when submitting an original schedule, and will not display for zeroing out an existing schedule.
- Only Confirmed Schedules will be included in billing, Pending Schedules will not be included

Where Schedule Confirmation type is DUAL

- Companies that have 'Confirmed' the contract are able to upload, update, or confirm the schedules.

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- Companies that have not confirmed the contract are unable to upload, update, or confirm any schedule. They can view the schedules that are uploaded by confirmed party.
- If the contract is confirmed by both companies, any company can upload, update, confirm schedule within Start day and Confirmed Stop day, if last business day settings allows.
- All schedules need to be confirmed by Buyer as well as Seller. If there is a Confirmed schedule and a pending schedule for a date, once the deadline is passed, Confirmed schedules will be considered for billing. Pending row will stay in historic state.
- Confirming companies have to upload the exact same MWh values to confirm the Pending schedule or use UI to confirm the schedule as it is. If the confirming company uploads the file that has different MWh values then system will update the Schedule with new MWh values and will still show in confirmed for that company, however, schedule will not be confirmed until the other company confirms the new MWh values.
- If a company proposes a new date in future (extending contract) then only the company that has proposed the new date should be able to upload schedule till the new proposed date is confirmed by the other party. Whereas company that needs to confirm the new proposed date will be able to upload & confirm only until stop confirmed date.

Where Schedule Confirmation type is Buyer

- Only the buyer in the contract can upload the schedules in this type of contract.
- Buyers cannot start uploading schedules until contract is confirmed by seller.
- Once the Buyer uploads the Schedule its goes straight in Confirmed Schedule status, he does not need confirmation at schedule level from seller.
- Buyer can update the MWh values in uploaded schedule unlimited number of times until schedule passes the deadline.
- Buyers cannot upload any schedule beyond the Stop Confirmed date. If a company proposes a new date in the future (extending contract) they need to wait to upload the schedules until other party confirms the new dates.

Where Schedule Confirmation type is Seller

- Only the seller in the contract can upload the schedules in this type of contract.
- Seller cannot start uploading schedules until contract is confirmed by the buyer.
- Once the Seller uploads the Schedule its goes straight in Confirmed Schedule status, they do not need confirmation at schedule level from the buyer.
- Sellers can update the MWh values in uploaded schedule unlimited number of times until the schedule passes the deadline.

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- Sellers cannot upload any schedules beyond the Stop Confirmed date. If a company proposes a new date in future, (extending contract) they need to wait to upload the schedules until other party confirms the new dates.

Editing Schedule via UI

- Any values from New(MWh) column will move to Pending(MWh) once the Confirm button is clicked for Dual type contract.
- Any values from New(MWh) column will move to Confirmed(MWh) once the Confirm button is clicked for Buyer or Seller type of contract.
- If there are no values in any box under Pending(MWh) and New(MWh) column and user clicks confirm, an error message will be displayed
- If there is an existing schedule in Pending (MWh) and user clicks on Confirm button without entering any values in New(MWh), Schedule will be confirmed with existing values in Pending(MWh) column.
- If there are values in Pending(MWh) and the user inserts values in for a few hours and leaves the other blank it will update the schedule in Pending(MWh). The other company needs to confirm entire schedule in order to move schedule from Pending to Confirm.
- If there are no values in Pending(MWh) and user inserts values in for a few hours and leaves the rest blank, values will move to Pending(MWh) and Blank hours will be considered as 0 MWh. In Case of a Buyer or Seller confirmation type same logic is applied and values will move straight to Confirmed(MWh).
- Application will not allow entering negative MWh values
- Application will not allow MWh values more than three decimals.

6. Multi-Day Schedule Entry Feature

- Multi-day Schedule entry module will create or update schedules for given time range. All the Rules regarding Creating and Updating schedule will follow respecting the confirmation type rules.

7. Schedule Assistant Feature

- Schedule Assistant needs 'From' hour, 'To' hour and 'Amount' box filled.
- Clear button will clear any values from Schedules assistant as well as 'Schedule Entry Form' regardless they are filled with Schedule Assistant or without it.
- Fill button only fills out the Schedule entry form with the MWh value entered in 'Amount' for the hours entered in 'From' & 'To' field. It will not 'Submit' the Schedule.
- User can use any hour range. e.g. 'From : 1 To : 5' OR 'From : 0 To : 24'

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- User cannot enter negative values in 'Amount' field.
- User cannot enter more than 3 decimal values in 'Amount' field.
- User can use optionally 'Use Peak' feature by enabling check mark for "Use Peak".
 - If used from **Multi-Day Schedule** page it fills in value entered in **On Peak** input box for all non-holidays from 7:00 EPT to 23:00 EPT.
 - If used from **Multi-Day Schedule** page it fills in value entered in **Off Peak** input box for all non-holidays from 0:00 EPT to 7:00 EPT and 23:00 EPT to 0:00 EPT and also uses same value for entire market day on NERC Holidays and weekends.
 - If used from **Edit Schedules** page it fills in value entered in **On Peak** input box from 7:00 EPT to 23:00 EPT. NOTE it will not consider entire day as off peak even if it is weekend day or a NERC holiday.
 - If used from **Edit Schedules** page it fills in value entered in **Off Peak** input box from 0:00 EPT to 7:00 EPT and 23:00 EPT to 0:00 EPT. NOTE it will not consider entire day as off peak even if it is weekend day or a NERC holiday.

8. File Upload Feature

- Only files with PJM standard format will be accepted for schedule inserts. Please refer to PJM file upload format in PJM Standards Formats section of this document.
- All transfer files are subjected to two validation routines. If any part of the file fails, either validation check or the business rules check, a response will be sent back to the InSchedule user detailing the errors that occurred. No data will be uploaded if file contains any errors.
- Users can upload multiple files at once. Users would see stacked status messages with result for each file.
- User could reuse the uploaded files for updating schedules. The data check will be done when the same file has been uploaded and only 'Changed' data will update the older data.

Regular schedule upload

- Data Value for Each Hour – It is not required to enter each hour of the day. Those hours that are not entered will default to zero. Schedules can be entered in 0.001 MWH increments.
- Range of Hours – The Start Hour-Stop Hour combinations can represent a range of hours. Example: 0-3 represents three hours (12 A.M. to 12:59 A.M.; 1 A.M. to 1:59 A.M.; and 2 A.M. to 2:59 A.M.)
- Standard/Daylight Savings Time – When transitioning to Standard Time **from** Daylight Savings Time (i.e. 25 hours in one day), the MWh value for the extra hour must be indicated in a 24-25 Start Hour-Stop Hour combination. When transitioning **to** Daylight Savings Time, the MWh value in hour 2-3 will be ignored if entered.
- Multiple Schedules – Multiple schedules and contracts can be combined into one transfer file.

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Reconciliation upload

- Data Value for Each Hour – It is not required to enter each hour of the day. Those hours that are not entered will default to zero.
- Range of Hours – The Start Hour-Stop Hour combinations can represent a range of hours. Example: 0-3 represents three hours (12 A.M. to 12:59 A.M.; 1 A.M. to 1:59 A.M.; and 2 A.M. to 2:59 A.M.)
- Standard/Daylight Savings Time – When transitioning to Standard Time for Daylight Savings Time (i.e. 25 hours in one day), the MWh value for the extra hour must be indicated in a 24-25 Start Hour-Stop Hour combination. When transitioning to Daylight Savings Time, the KWh value in hour 2-3 will be ignored if entered.
- KWh Values – Negative KWh values are allowed and represent undersupplied customer load. Positive KWh values represent oversupplied load.

9. PJM Standard formats for file upload

InSchedule upload format

| Data Element | Description | Example |
|-------------------------------|--|------------|
| Header | The header indicates the current section is an energy schedule. | *INTSCH* |
| Contract identifier | Unique Contract Number identifier | 123456789 |
| Start Date | Date on which the schedule starts and should be in MM/DD/YYYY format. | 01/03/2003 |
| Stop Date | Date on which the schedules stops and should be in MM/DD/YYYY format. | 01/04/2003 |
| Start Hour 1 –Stop Hour 1 MW | Start/Stop Hour of the Day. Megawatt-hrs for the hours. Every Start Hour – Stop hour pair must be followed by a MWh (0.001 MWH increments accepted). | 0-1 50 |
| Start Hour 2-Stop Hour 2 MW | | 1-2 50 |
| Start Hour 3-Stop Hour 10 MW | | 2-10 50 |
| Start Hour 11-Stop Hour 24 MW | | 11-24 50 |

Schedule Reconciliation Format

| Data Element | Description | Example |
|-------------------------------|--|------------|
| Header | The header indicates the current section is an energy schedule reconciliation. | *ENGREC* |
| Contract identifier | Unique Contract Number identifier | 123456789 |
| Start Date | Date on which the schedule starts and should be in MM/DD/YYYY format. | 01/03/2003 |
| Start Hour 1 –Stop Hour 1 KW | Start/Stop Hour of the Day. Megawatt-hrs for the hours. Every Start Hour – Stop hour pair must be followed by a KWh (0.001 KWH increments accepted). | 0-1 50 |
| Start Hour 2-Stop Hour 2 KW | | 1-2 50 |
| Start Hour 3-Stop Hour 10 KW | | 2-10 50 |
| Start Hour 11-Stop Hour 24 KW | | 11-24 50 |

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- Please refer to InSchedule – File Upload Format Definition document in Attachments for more details on file upload formats

10. History Feature

- First and Last name of the user making major changes in contract or schedules will be recorded and displayed with date and time stamp.
- Users can see the name of the each file for uploads and what schedules were entered under each file with timestamp.

11. Comments Feature

- First and Last names of the users posting comments will be recorded and displayed with date and time stamp.
- Latest comments will be displayed on contract details page and will allow user to click on it and navigate to comments tab.

12. Download Feature

- Download Button: Located on the Contracts tab, the Download button downloads a CSV file with all contracts for the user's organization for the date range user entered on dashboard. Users can view historical data per the PJM data retention policy boundaries.
- Download Button: Located on the Schedules tab, the Download button downloads a CSV file with all schedules for the user's organization for the date range user entered on dashboard. Users can view historical data per the PJM data retention policy boundaries.
- Download Button: Located on the Schedules tab from the Contract Details page, the Download button downloads the schedules for the particular contract that user is in. By default it will download schedules for 'sysdate – 366 days'.

13. Reports Feature

- Five reports will be available via the InSchedule application and browserless InSchedule client. Those reports are: EDC Hourly Loss Deration Factor, Reconciliation Data, Company Static Data, Schedules and Contracts.

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- EDC Hourly Loss Deration Factor and Reconciliation Data reports will allow users to specify flexible 45 day date range to download. Users can request historical data per the PJM data retention policy boundaries.
- Schedules and Contracts will allow users to specify the flexible 366 days date range to download for that period. Users can request historical data per the PJM data retention policy boundaries.

14. PJM Command Line Interface for InSchedule (Cli)

- PJM Command line interface (Cli) would follow all rules defined in Contracts, Schedules, File Upload, Download, and Reports section of this document.
- Please refer to Cli user guide in Attachments section for more details on PJM Cli for InSchedule

15. Message Explanation

The InSchedule application shows various types of messages to the user to help them understand the result of their actions.

Error messages are shown when the users request does not meet PJM Business Rules, such as schedule deadlines, file format, etc. Error messages would have these icons  ,  and the text color will be Red.

Warning messages are shown when the users request does not make any changes in records or user has performed an action that wasn't needed, such as confirming already confirmed schedule. Warnings would have these icons  ,  and text color will be Orange or Black.

Success messages are shown when the users request is validated successfully and their actions resulted in successfully creating or modifying records in the InSchedule application, such as saving a new contract, uploading a schedules file, etc. Success messages would have this icon  and text color will be Green.

| Message shown | Meaning of the Message | Suggested Action(s) |
|---|--|---|
| The start date Aug 1, 2012 must precede the stop date Jul 1, 2012. | You have entered a Stop Date that is prior to a Start date. | “To” should be on or after “From”. Please make changes and try again. |
| Exceeded max date range of 31 by having 121 days in a range between Aug 1, 2012 and Nov 30, 2012. | You have entered a date range that exceeds the allowed date range. | Please change the date range to a valid date range and try again |
| ErrorContract ID 12345 is type DUAL and user is not allowed to | You have not confirmed the contract yet and are trying to | Please confirm the Contract and then confirm the schedule. |

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| upload schedules for this contract because it is either not confirmed or the user is not the proper buyer/seller. | confirm the schedule. | |
| New Document.txt Line 0:Exception validating file - User company NEW PJM TEST must be an EDC company to upload energy reconciliations. | The User company (in this case New PJM TEST) is not an EDC and they are trying to upload the reconciliation file | You are not allowed to upload reconciliation files if you are not listed as EDC company for InSchedule. |
| New Document.txt Line 2:Contract ID '12345' is not active or your organization is not the buyer or seller. | You are trying to upload a schedule for a contract that is not active for that date or your company is not a buyer or seller on that contract. | Please check if the schedule date falls within the contract boundary. Please make sure file is in the format that PJM accepts and re-upload the file. |
| New Document.txt Line 2:Schedule date Oct 25, 2012 must be after last business date Oct 31, 2012. | Deadline to enter the new schedule has already passed. You cannot enter the schedule now. | As per Business Rules you cannot enter the schedules one you pass the deadline for entering new schedule. Please contact PJM helpline for assistance. |
| ErrorSchedule Nov 6, 2012 for contract id 12345 may not contain all zero values. | You cannot enter new schedule with all zero values. | You need to enter valid MWh values to be able to upload the schedule. NOTE: Zero value schedule is allowed only when there is an existing schedule with valid MWh values and you are trying to delete the existing schedule. |
| Invalid buyer and seller combination. The buyer and seller in a contract must not be the same | You have entered same company name in buyer and seller fields. | Please select the Buyer and Seller for the contract. They cannot be same company. |
| Invalid buyer and seller combination. Your contract must specify a buyer or seller for an organization accessible by you | You have not entered your companies name in Buyer or Seller field. | Your company has to be either buyer or seller, you cannot create contract for other companies. Please select the correct Buyer and Seller for the contract. |
| Invalid Dates. Start date must precede stop date | Your contract start date is after contract stop date. | Please check the Contract Start date & Contract Stop date. Use correct dates & try saving contract again. |
| Invalid Dates. Start date must be after 10/31/12 12:00 AM | Start date must be after last business date set by PJM which is same as schedule upload | Please check your contracts start date. If that is the correct date your contract started & you |

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| | deadline date. | want to report the contract then you have to contact PJM support center to let you do it. |
| Proposed stop date must be different than the current confirmed stop date | You are entering the same date that is current Stop date for this contract. Propose Date function is for extending or shortening the contract. | Please select the correct New stop date. If that is the correct date then you do not have to take any action someone from you company has already updated the new stop date to the one you are trying to change. Please check the history for details. |
| Invalid PNodesPNode 'Test PNode' effective date of 11/6/12 12:00 AM is after contract start date of 11/2/12 12:00 AM | PNode you selected in Source or Sink is not effective when your contract starts. | You cannot start the contract with this PNode until this PNode is effective. Either change your contract date & start when PNode will be effective or if you feel there is a mistake in PNode's effective date, contact PJM support center and submit request to correct the information on that PNode. |
| Invalid PNodesPNode 'Test PNode' terminate date of 11/7/12 12:00 AM is before contract start date of 11/9/12 12:00 AM | PNode you selected in Source or Sink will be terminated even before you start this contract. | You cannot start the contract with this PNode if it's going to terminate. If you feel there is a mistake and this PNode would not be terminated on the date mentioned in error please contact PJM support center and submit request to correct the information on that PNode. |
| Invalid PNodesContract with Service Type 'GENERATION' must have the same Source and Sink Pnodes | Your Source field does not match with the selected Sink field. | The Source and Sink aggregates must be the identical if the services type is Generation. Please check the details that you are entering in the form, refill the information with correct Service Type or Source and Sink. |
| Invalid PNodes Contract with Service Type 'WHL LD RESP' must have the same Source and Sink Pnodes | Your Source field does not match with the selected Sink field. | The Source and Sink aggregates must be the identical if the services type is Wholesale Load Responsibility. Please check the |

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| Invalid PNodes Contract with Service Type 'RTL LD RESP' must have the same Source and Sink Pnodes | Your Source field does not match with Sink field. | The Source and Sink aggregates must be the identical if the services type is Retail Load Responsibility. Please check the details that you are entering in the form, refill the information with correct Service Type or Source and Sink. |
| Invalid Pricing Day Ahead pricing is not valid for a contract with Service Type 'GENERATION' | Day Ahead pricing is not valid for the Service type Generation | Pricing Day Ahead: This pricing type is only available to Internal Bilateral Transactions. Please check the details that you are entering in the form, refill the information with correct Pricing & Service type. |
| Invalid Pricing Day Ahead pricing is not valid for a contract with Service Type 'RTL LD RESP' | Day Ahead pricing is not a valid for Service type Retail Load Responsibility | Pricing Day Ahead: This pricing type is only available to Internal Bilateral Transactions. Please check the details that you are entering in the form. Refill the information with correct Pricing and Service type. |
| Invalid Pricing Day Ahead pricing is not valid for a contract with Service Type 'WHL LD RESP' | Day Ahead pricing is not a valid for Service type Wholesale Load Responsibility | Pricing Day Ahead: This pricing type is only available to Internal Bilateral Transactions. Please check the details that you are entering in the form. Refill the information with correct Pricing and Service type. |
| New Document.txt Line 2:ContractID expected but was not a valid number: | Your file is missing the Contract ID for a schedule. | Please correct the data in file, Verify that you have entered the valid Contract ID, make sure file is in the format that PJM accepts and re-upload the file. |
| StartDate expected but was not a valid date: mm/dd/yyyy | Date format you used in file do not comply with PJM file format. | Please update date format to mm/dd/yyyy and try uploading |

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| | | again. Remember if your date is 4/23/2012 it should be 04/23/2012. |
| PJM Test 12F.txt Line 2:Reconciliation 12/11/2012 for Contract ID '1921' is invalid because it is before October 2012 or after yesterday. | Your file has a reconciliation value for date that is older than 2 months or greater than yesterday. | Please remove the schedules/values that are older than 2 months & greater than yesterday. So if current month is 201212 then you can upload reconciliation files for 201210, 201211, 201212 till yesterday. |
| Contract Id: 'foo' must be a valid long number. Example: 98765432 | You have entered invalid search criteria. This field takes only valid Contract ID. | Please enter the valid contract ID and try again. |
| Unable to located contract with id=123456 | Contract ID you are looking for is not in the database. | Please make sure you are entering accurate contract ID and try again. Also refer to current data retention policy to know how much data in past we hold in database. |
| New Text Document.txt Line 1:Exception loading file - First line of file must be a valid record type | Your file is missing "*" on first line. First line for file always has to be *INTSCH* | Please make sure file is in the format that PJM accepts and re-upload the file. |
| New Text Document.txt Line 11:Duplicate schedule found for contract id: 12345 schedule: ScheduleSegment[date=Sat Jan 12 00:00:00 EST 2013,startTime=0,mwhrs=100] | Either you have duplicate schedules in file or you are missing *INTSCH* line for some of the schedules. | Please make sure file is in the format that PJM accepts and re-upload the file. |
| New Document.txt Line 4:StopDate expected but was not a valid date: | Your file is missing the Stop date for a schedule. | Please correct the data in file, Verify that you have entered the valid stop date, make sure file is in the format that PJM accepts and re-upload the file. |
| New Document.txt Line 3:StartDate expected but was not a valid date: | Your file is missing the Start date for a schedule. | Please correct the data in file. Verify that you have entered the valid start date, make sure the file is in the format that PJM accepts and re-upload the file. |
| New Document.txt Line 5:null | Your file has one blank line which is violation of file format that PJM accepts. | Please remove the white space from file make sure file is in the format that PJM accepts and re- |

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| | | upload the file. |
| Please provide a valid date | You haven't entered the date & just clicked Go button. | Please select the desired schedule date by clicking on box that says "Select a date to Add/Edit" and then click Go |
| New Text Document.txt Line 4:StopDate: 12/12/2013 is more than 1 year in advance of the Last Business Date: 11/01/2012 | You are not allowed to upload schedules more than a year in advance from PJM's deadline date. Usually PJM's deadline or last business date is today's date minus one day to enter the schedule, you cannot upload the schedule over a year from that date. So in this case here last Business Day is 11/01/2012 so user can upload schedules until 11/01/2013, he cannot pass the 11/01/2013. | No action needed now if your dates in the file are correct. You can plan to upload the schedules on a later day when they fall into the allowed upload window of one year. |
| New Text Document.txt Line 2:Schedule 01/12/2012 for Contract ID '12345' is outside the date range of the contract | Schedule date 01/12/2012 do not fall within the date boundary of Contract ID 12345. So Contract '123456' is not active on 01/12/2012. | Please check the contract details & edit the schedule dates. Check for any typos and accuracy of file format and then try again. |
| Invalid Dates Start date 12/1/13 12:00 AM is later than 1 year after last business date cutoff of 11/1/13 12:00 AM | Contract start date is more than a year in advance than Last Business day. In this example here Last Business Day is 11/01/2012 which means user can create a contract with start date before 11/01/2013. | No action needed now if your dates in the file are correct. You can plan to create the contract on a later day when it falls into the allowed upload window of one year. |
| Error Pending Stop Date Nov 6, 2012 has already passed the Last Business Date Nov 9, 2012 so a new pending stop date must be proposed. | Pending Stop date has passed the deadline or Last Business day set by PJM. You cannot confirm the contract now. In this example Pending stop date was November 6th and Last business day is November 9th so user cannot confirm this contract now. | If this contract is still valid you can click on Propose new date and enter the contracts Stop date. If the contract dates you have are accurate and you haven't done InSchedule entry before deadlines then you have to contact PJM support center to help you in this. |
| * The selected dates span the long day, a value should be provided for the time block 24-25. | Your date range includes the long day, first Sunday of November. | Please enter MWh values in 24-25 box for the extra hour. |

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| * The selected dates span the short day. The value entered for the 2-3 time block will be ignored for the short day. | Your date range includes short day, second Sunday of March. | No action needed just a notice for you that values for 2-3 for that day will be deleted. |
| WARNING: All schedules that are later than this new Confirmed Date will be deleted. Are you sure you want to confirm this contract? | Other company has shortened the Contract & you are going to confirm it. BUT there might be schedules entered previously after the New Stop date that you are confirming now. All the schedules after this new stop date will be deleted from system, this message is asking you if you are sure you want to accept the new Stop date and delete the schedules that fall after the new stop date. | Please make sure you really want to shorten the contract before clicking on Confirm. |
| Confirmation Failed Schedule Oct 31, 2012 for contract 12345 has already been confirmed! | You or someone from you company has already confirmed that schedule. | Please check the details for that schedule. No action needed to confirm the schedule. |
| Upload File File 'New Document.txt' uploaded successfully. | Your file has been uploaded successfully. | No action needed. |
| Success: Contract 12345 successfully saved! | New contract has been successfully created. | No action needed. |
| Success: Pending Stop date revoked successfully | Proposed Stop Date has successfully revoked. | No action needed. |
| Upload File File 'New Document.txt' uploaded successfully. | Your file has been uploaded successfully. | No action needed. |
| Success: Schedule successfully saved | Your schedule has successfully saved. | No action needed. |
| Success: Schedule successfully confirmed | You have successfully confirmed the pending schedule. | No action needed. |

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16. Data retention policy

- PJM will maintain online in the InSchedule application five (5) years worth of schedules. PJM will archive the previous two (2) years of schedule data.
- PJM will maintain online in the InSchedule application all active Contracts and contracts that have a five (5) years prior termination date. PJM will archive the previous two (2) years of terminated contract data.
- PJM will purge the specified data one time annually to keep a little more than five (5) years available for each until the purge occurs. PJM will then purge the prior year from archive to keep seven (7) years of data available.

17. Definitions

- **Contracts** - allows you to create an agreement between two parties to create schedules for a designated period of time.
- **Schedules** - allows you to create energy schedules consisting of 24 MWh values per day. Schedules must be created for a specific contract.
- **Dual** - Under a dual Contract, all schedules must be confirmed by both parties
- **Unilateral** - Under a unilateral Contract, one party (either the buyer or the seller) is given confirmation rights to all energy schedules between the parties.
- **Seller** - The end date of the contract.
- **Buyer** - The energy purchasing participant.
- **Source** - Energy origin.
- **Sink** - Energy destination.
- **Contract ID** - A unique number that identifies the contract.
- **Cli** – Command Line Interface

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18. Attachments

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| InSchedule – File Upload Format Definition |  |
| PJM Cli user guide for InSchedule |  |