

Outage Management System (OMS)

OMS End-User Document

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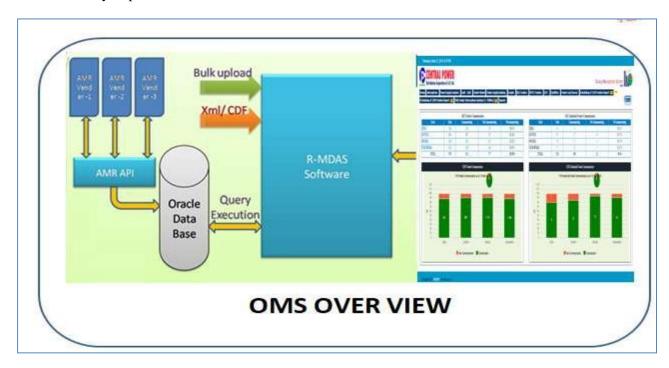
1. OMS Overview:

Outage Management System (OMS)

OMS is an initiative of APCPDCL DISCOM, Andhra Pradesh, which provides Outage Management System Platform for dissipating the outage information to power distribution consumers across APCPDCL through OMS Application.

Outage Management System – Features

- 1. Feeder Modem Communication
- 2. Discom wise Power Supply Analysis Reports
- 3. Feeder Interruption Analysis Reports
- 4. SAIDI-SAIFI(Day/Week/Month) Reports
- 5. GIS Power Supply Reports
- 6. Power Supply Position Reports
- 7. Scheduled/Unscheduled Outages Reports
- 8. AGL Feeders Power Supply Analysis Repors
- 9. Industrial Feeders Power Supply Analysis Reports
- 10. Load Survey Reports





OMS Home Page



OMS Home Page

Outage Management System (OMS) home screen shows the 11KV Feeders Communication Status for each circle and it also displays graphical representation for the 11KV Feeders Communication as seen in the above picture. There are several tabs in this application which give the reports of Power outages/Interruptions, Power Supply Analysis, Feeder Master, Substation details, Feeder Load Survey And Scheduling of 11KV and 33KV Feeders.

2. INTERRUPTIONS





Interruptions Tab

In the Interruptions tab you can find the reports for the **Live Interruptions**, **Interruption Analysis for Feeders for > 30 minutes**, **Interruptions Abstract** and **Interruption Durations**.

In the Live Interruptions tab you find the report for all feeders irrespective of greater than 30 minutes and interruption durations as seen in the image below.

LIVE INTERRUPTIONS



Live Interruptions Screen

In this report the live interruptions with interruption durations are seen and along with this there are two columns Interruption Reasons and Remarks which is to be updated in the AE login screen.

FEEDER INTERRUPTION ANALYSIS (>=30 MINS)





In this report the interruption analysis for feeders with interruptions greater than or equal to 30 mins are shown.



The above image shows the total interruptions from a particular circle and has columns mentioning Time of restoration of the interruption, Reasons for interruptions, whether the modem connected to the feeder is defective or not and remarks.

INTERRUPTION ABSTRACT





In this report you will be able to see the total available feeders in the respective circles and the number of communicating, power outage and not communicating feeders for respective circles.



Example: This is the report displays LIVE feeders in CRDA circle.

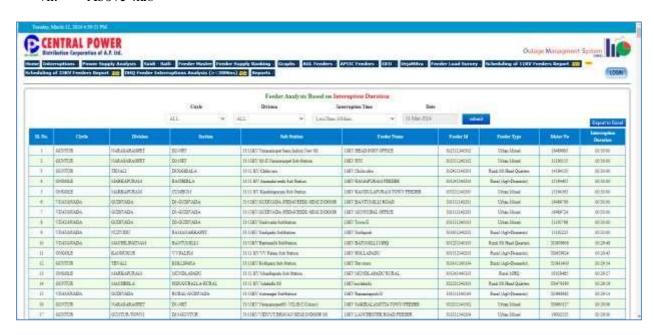
INTERRUPTION DURATION





In this report you can find the feeders with respective interruption durations as seen above.

- i. All interruptions
- ii. Less than 30 mins
- iii. Interruption from 30 mins to 1hr
- iv. Interruption from 1hr to 2hr
- v. Interruption from 2hr to 3hr
- vi. Interruption from 3hr to 4hr
- vii. Above 4hrs



Example: The above report shows interruptions for Less than 30 mins.



3. POWER SUPPLY ANALYSIS

- i. Feeder Power Outage
- ii. Circle-wise supply hours
- iii. Power Supply (Section) report

FEEDER POWER OUTAGE



Section wise Feeder Power Outages report.

In this report feeder power outages greater than 15 mins is shown for respective circles

CIRCLEWISE SUPPLY HOURS



Circle wise Feeders Supply hours Screen.



In this report you will be able see supply hours for 24hrs, 23-24hrs, 22-23hrs and less than 22hrs feeders.

POWER SUPPLY (SECTION) REPORT



Section Wise Power Supply Report Screen.

Here section wise power supply report is available with each feeder interruption and interruption duration along with feeder supply hours.



On clicking the feeder's interruption against each feeder for the selected day is shown. As seen in the above image.



4. SAIDI-SAIFI



In SAIDI-SAIFI the interruption index and interruption duration is calculated.

You can find 3 reports in this tab

- i. SAIDI-SAIFI Excluding 2nd Saturdays and Sundays.
- ii. SAIDI-SAIFI ABSTRACT
- iii. SAIDI Ranking

SAIDI-SAIFI Excluding 2nd Saturdays and Sundays



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SAIDI-SAIFI Excluding 2nd Sat & Sun Report Screen.

This report shows SAIDI-SAIFI excluding 2nd Saturdays and Sundays for the selected date range.

SAIDI-SAIFI ABSTRACT



SAIDI-SAIFI Abstract Report Screen.

This is the abstract report for SAIDI-SAIFI including all other validations such as Excluding 2nd Saturdays and Sundays, Scheduled Outages, Scheduled maintenances etc.

SAIDI: SAIDI= (restoration time in minutes*Total number of customers interrupted)/Total number of customers served.

SAIFI: SAIFI= (Total No Of customers interrupted)/ (Total No. Of Customers served) Assuming all customers connected with the feeder gets interrupted for each feeder failure.

SAIDI-SAIFI Ranking





SAIDI-SAIFI Ranking Report Screen.

This report gives the circle wise rankings for SAIDI-SAIFI abstract for the selected date ranges as seen in the image above.

5. FEEDER MASTER



Feeder Master Screen.

This report gives the master details for all feeders in the DISCOM. You can even select the required option from the dropdown to view selected feeders from the circles.



6. AGL FEEDERS



- i. AGL interruptions
- ii. AGL Feeders
- iii. Pure AGL> 9hrs Supply
- iv. Above 9hrs Power Supply feeders list
- v. Below 9hrs Power Supply feeders list

AGL Interruptions



AGL Feeders Interruption Report.

This report gives the Live AGL feeders interruption data from all circles.



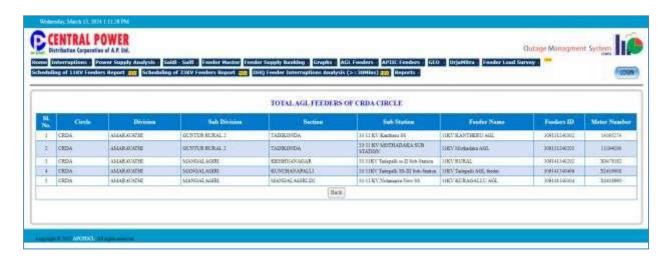
AGL Feeders

This report gives data of all the AGL feeders available in DISCOM.



Circle-Wise AGL Feeders Screen.

In this image we can see total AGL feeders in DISCOM against each circle and from those how many feeders are communicating and how many feeders are in not communicating status.



Total AGL feeders report





Communicating Feeders report



Not Communicating Feeders report



Pure AGL > 9HRS Supply



Greater than 9 hrs AGL feeders report.

This report gives the AGL feeders data that are provided more than 9 hrs supply. Mentioning the supplied hours in the last column for the selected month. Here in the feeder type dropdown, you will find the types of AGL feeders available (AGL, AGL+Domestic and Pure AGL feeders)

Above 9 hrs Power Supply Feeders



Above 9 hrs Feeders Report

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This report gives the data for all the feeders with supply hours greater than 9 hrs irrespective of AGL, Pure AGL and AGL+Domestic. The feeder type dropdown menu is provided to find the feeders data for required feeder types in (All, AGL + Domestic, Pure AGL).

Below 9 hrs Power Supply Feeders



Below 9 hrs Feeders Report

7. APIIC Feeders





This report gives the industrial feeders data and their interruptions report.

- i. APIIC Interruptions
- ii. APIIC Feeders
- iii. APIIC Power Supply Report
- iv. EODB Industrial

APIIC Interruptions



APIIC Feeders Interruptions Report

Here you can find the Industrial feeder's interruptions, Above is the format for this report.

APIIC Feeders



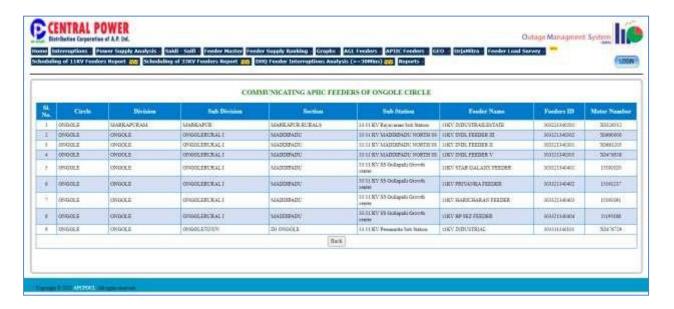
Circle wise APIIC Feeders Power Supply Status Report.

This report populates the total industrial feeders in each circle and their communicating status.



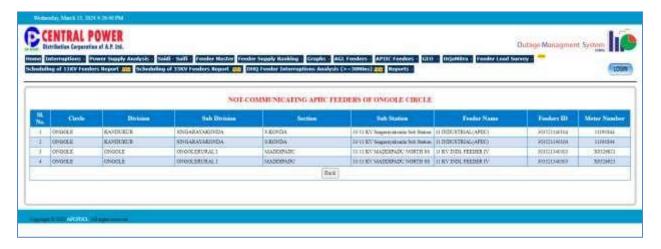


Total APIIC feeders Screen (ONGOLE)



Communicating Feeders Screen (ONGOLE)





Not-Communicating Feeders Screen (ONGOLE)

These are the screens for each column that represent the APIIC Feeders communicating status.

APIIC Power Supply Report



Section Wise power supply screen.

This report populates the section wise power supply report for the industrial feeders in the selected option. Interruptions are also provided in this screen with interruption duration, Average supplied hours for that feeder and Average interrupted hours.



EODB Industrial



EODB Industrial feeders report screen.

All the EODB industrial feeders and services against those feeders are provided in this report.

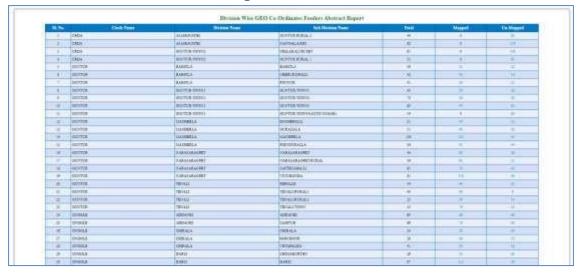
8. GEO

- i. Geo Co-ordinates
 - a. Feeder wise Sub-Station geo co-ordinates
 - b. Circle wise Sub-Station geo co-ordinates
- ii. Sub-Station Map
- iii. Power Supply status Map
- iv. SS wise feeders count report



Geo Co-ordinates

Feeder wise Sub-Station geo co-ordinates



Feeder Wise SS geo co-ordinates screen.

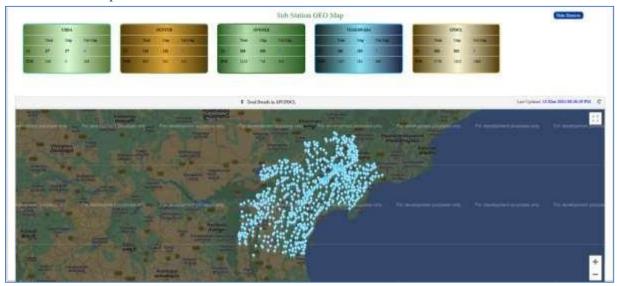
This report populates the data for the mapped and unmapped feeders in each sub-station. The following screen is an example for Feeder Wise GEO Co-Ordinates Mapped in BAPATLA Division.



Example screen showing Feeders mapped in Bapatla Division.



Sub-Station Map



SUB-STATIONS map report.

In this page you can see the sub-stations in each circle and total SS available in DISCOM. The pointers give the name of the SS and its Circle, Division and SS name when cursor placed on it.

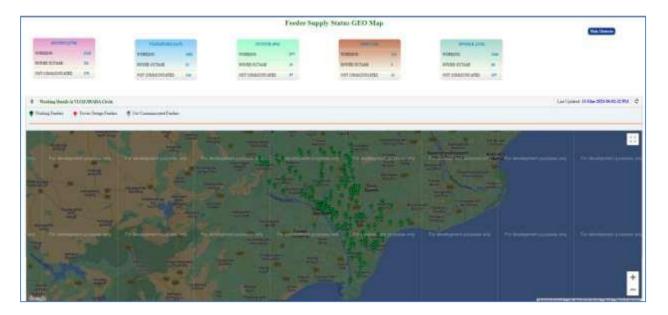


Pointer showing the details of the SS.

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Power Supply Status Map

This page displays map with feeders that are working, under power outage and the feeders which are not communicating as shown in the images below.



Map showing the working feeders.



Map showing power outage feeders.





Map showing Not-Communicating feeders.

SS wise Feeders Count Report



Circle wise feeders count against each SS.



9. FEEDER LOAD SURVEY

- i. Load Survey Section Wise
- ii. Load Survey Feeder Wise
- iii. Feeder Wise Hourly Load Survey

Load Survey Section Wise



Section wise load survey

This report populates load survey for all feeders in the selected sections.

Load Survey Feeder Wise



Feeder Wise Load Survey Report.



Feeder Wise Hourly Load Survey



Hourly Load Survey for all feeders.

In this report you will be able to find the hourly loads for all the feeders in the DISCOM for the selected date range and time from the Date & Time selection menu. Ans even you can select the feeder type for which the hourly loads are to be obtained.

Scheduling of 11KV Feeders Report



Scheduling of 11KV Report

This Report give the 11KV feeders scheduling data for all the circles.





Example screen for CRDA circle Scheduling of 11KV reports.

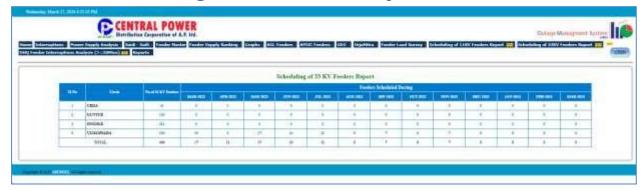


Detailed report for CRDA circle 11KV feeders scheduling.

These reports are generated as per the field person entries in respective AE logins.



10. Scheduling of 33KV Feeders Report



33KV feeders Scheduling report.

These reports are populated from the entries done in ADE/DE logins of respective circles.



Here the reports are available of 1 year against each month how many scheduling have been carried out.

The above screen shows the example of the scheduling of 33KV feeders for NOV-2023 month.





11. DHQ Feeders Interruption Analysis (>= 30 mins)

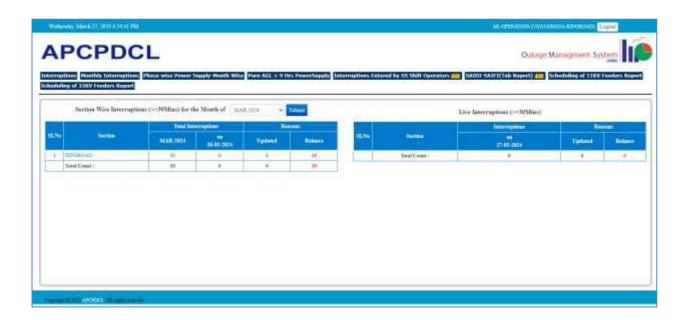
These reports give the detailed analysis for 11KV feeder's interruptions analysis for District Head Quarters (DHQ) type with greater than 30 minutes of interruptions. As seen in the above screen this report is obtained Circle wise, Division wise, Sub-Division wise, Section wise and also Feeder wise upon the requirement.

Logins (AE, SE, DE)

AE Login:

- 1. Interruptions
- 2. Monthly Interruptions
- 3. Phase Wise Power Supply Month Wise
- 4. Pure AGL>9hrs Power Supply
- 5. Interruptions Entered by Shift operators
- 6. Saidi-Saifi (Tab Report)
- 7. Scheduling of 11KV Feeders Report
- 8. Scheduling of 33KFV Feeders Report





The above screen is for AE login where AE's have to enter the interruption reasons against each feeder's for every month. Month selection is provided, you can see in the screen above.

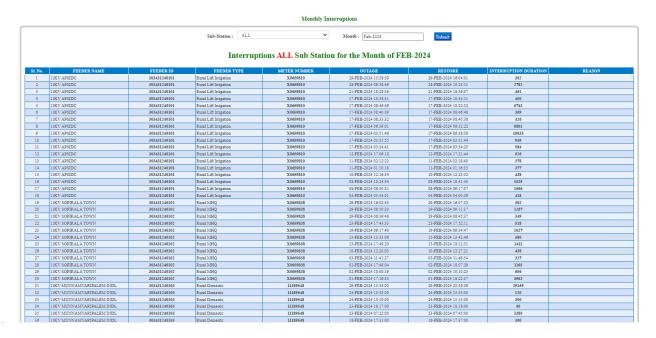


The above screen is opened when balance feeders are clicked and AE's have to enter the reasons for interruptions against each feeder's and even multiple feeder's selection to update the interruption reasons is also provide as seen. Once the reasons are updated those feeders reasons will be visible in the 11KV Feeder's Scheduling reports in the main screen.

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Monthly Interruptions.



The above screen is for the monthly interruptions tab in the AE logins to find the total number of interruptions in the total sub-stations under respective AE's.

Interruptions entered by SS shift operators.



In this report AE can see the interruptions that are entered by the SS shift operators from the dept app.



Phase wise power supply (Month Wise)



Month wise power supply against each phase for the dedicated feeder is obtained here; Total supply hours are given against which how much time 3Phase supply is given for how much time and 1Phase supply hours timing is mentioned.

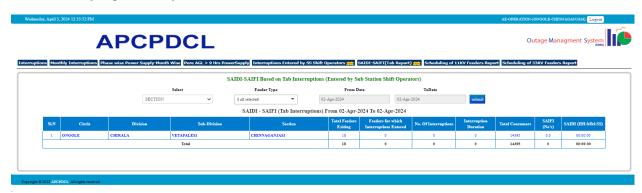
Pure AGL >9 hrs Power supply





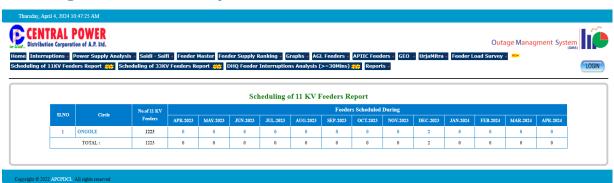
Here the feeders with supply hours >9 hrs are shown where the type is pure AGL and mixed (AGL+Domestic) feeders.

Saidi-Saifi (Report tab)



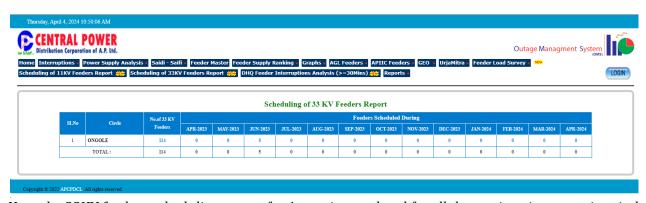
This report is for Saidi-Saifi data for the respective sections under the AE's.

Scheduling of 11KV Feeders Report



Here the 11KV feeders scheduling report for 1 year is populated for all the sections in respective circles.

Scheduling of 33KV Feeders Report

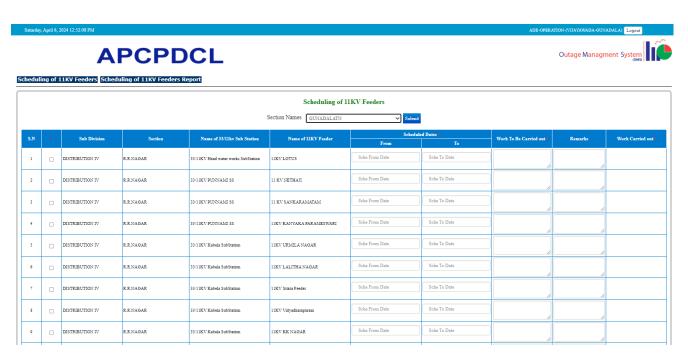


Here the 33KV feeders scheduling report for 1 year is populated for all the sections in respective circles.

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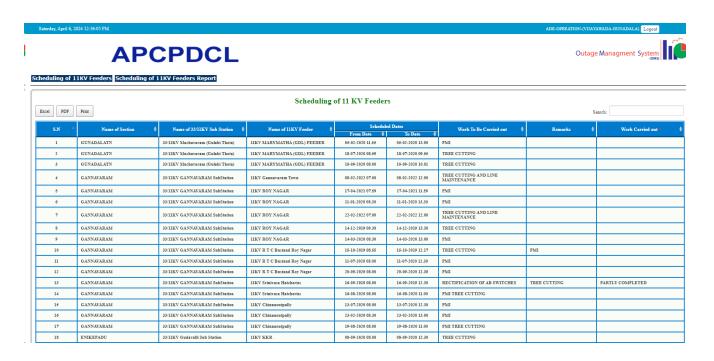
ADE Login:

- 1. Entering of 11KV Feeders Scheduling
- 2. Scheduling of 11KV Feeders Report



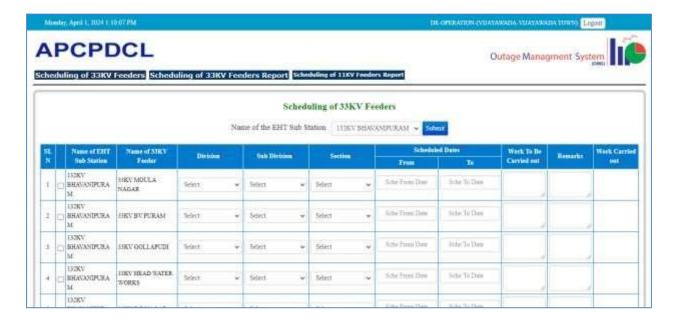
Scheduling of 11KV Feeders





DE Login:

- 1. Enter the Scheduling of 33KV Feeders
- 2. Scheduling of 33KV Feeders Report
- 3. Scheduling of 11KV Feeders Report







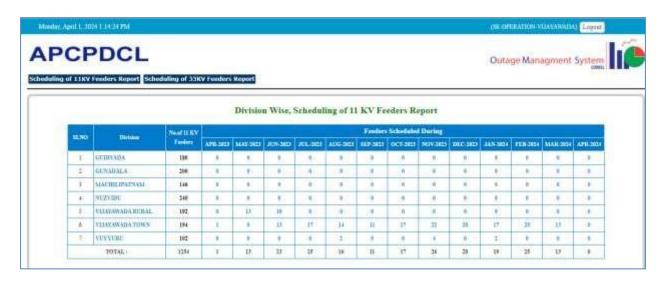


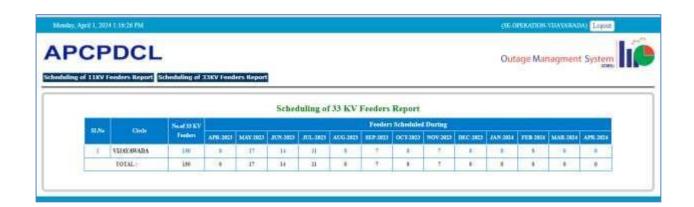


SE-Login

Display the abstract reports

- 1. Scheduling of 11 KV Feeders Report
- 2. Scheduling of 33 KV Feeders Report





Thank You

