



TM Forum

ANLAV Report

Zain Kuwait

Scenario: GB1526A – RAN Energy Efficiency Optimization

Sub-scenarios: 1, 2 & 3 (all validated in scope)

Maturity Level: Beta

Version 1.1.0

Date 14/06/2026

Region: Kuwait

Score: 4.00 (validated)

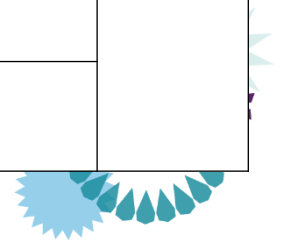


Kuwait Zain RAN Energy Efficiency Optimization ANL Assessment



Overall Score

Cognitive Activity	Service Capability	Weight	Sub-scenario 1	Sub-scenario 2	Sub-scenario 3	Overall Score
			Intra-RAT intra-frequency multi-Site energy saving	Intra-RAT inter-frequency multi-Site energy saving	Inter-RAT multi-Site energy saving	
			20%	40%	40%	
Intent	Intent Translation	15%	A	A	A	4.0
	Intent Fulfilment evaluation	10%	A	A	A	
Awareness	RAN Energy Saving Information Collection	10%	A	A	A	
Analysis	RAN Energy Saving Issues Identification	10%	A	A	A	
	RAN Traffic & Performance Prediction	10%	A	A	A	
	RAN Energy Saving Issues Demarcation & Root Cause Analysis	10%	A	A	A	
	Solution Generation	15%	A	A	A	
Decision	Solution Evaluation & Decision Making	10%	A	A	A	
Execution	Solution Implementation	10%	A	A	A	



Evidence :

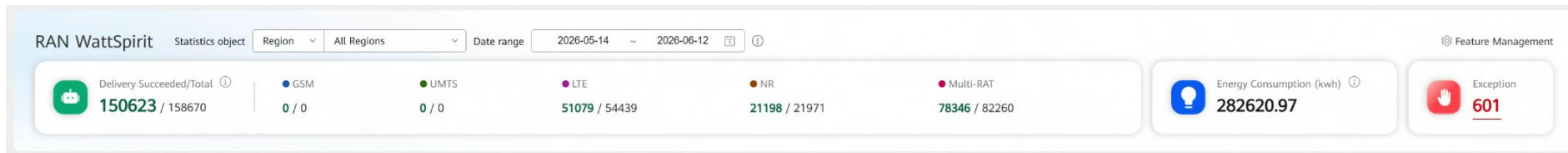


Figure1 : Wattspirit has empowered 150,623 out of 158,670 cells nationwide, including 51,079 4G cells, 21,198 NR (5G) cells, and 78,346 Multi-RAT cells.

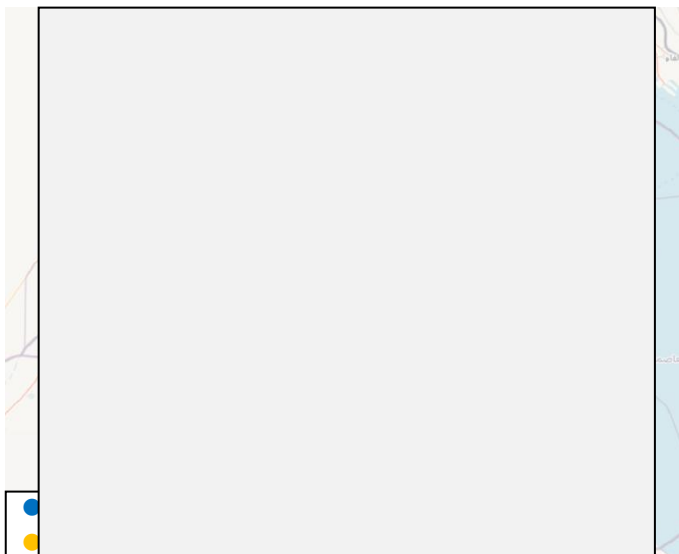


Figure2 : Wattspirit supports the configuration of multiple regions to manage the energy-saving functions of cells in batches. The blue and yellow legends represent different regions created by users themselves, which indicate from the coverage dimension, it shows that the coverage has reached all cells nationwide.

These two figures indicates that Wattspirit is capable of empowering all sites and cells across the country in terms of both quantity and coverage.



Intent Translation

Service Capability	Weight	Question	√ Option A	√ Option B	Option C	Option D
Intent Translation	15%	How does the System translate the RAN Energy saving intent to the RAN energy saving related control information? RAN energy saving intent includes RAN energy saving targets and performance targets (including but not limited to RAN UE Throughput Targets). Note1: Human defined policies can overwrite the automated selection of energy saving candidate objects	Based on RAN energy saving Intent defined by Human, the System intelligently selects candidate energy-saving objects (e.g. NE/CELL) and generates the RAN energy saving related control information, without Human Intervention. The system intelligently explores the energy saving gains and performance impacts to support human continuous adjustment of intent targets to achieve optimal energy saving effect and performance.	The System automatically generates RAN energy saving related control information through the execution of predefined Rules. Human manually select candidate energy-saving objects (e.g. NE/CELL) and confirm the RAN energy saving related control information based on the RAN energy saving intent.	RAN energy saving related control information are manually defined through basic templates	RAN energy saving related control information are manually defined based on expertise

Evidence :

Please recommend energy saving policies for NR cells. Only outdoor cells are optimized. Energy-saving benefits account for 5%.

Intent translation

Category	Parsed Result
Scene-level Energy-saving Strategy Recommendation Intent	N
Task-level Energy-saving Strategy Recommendation Intent	Please recommend energy saving policies for NR cells. Only outdoor cells are optimized. Energy-saving benefits account for 5%.
Need to Automatically Analyze Network Idle/Busy Periods	Y
Energy-saving Cell Coverage Type	Outdoor
Technology of Energy-saving Cells	NR
Special Requirements for Carrier Shutdown Frequencies	N
Preference for Aggressive/Conservative Energy Saving	N
Whether a Rate Guarantee Target is Set	N
Whether Experience-Preserving Energy Saving is Required	N
Gain Target	5%

Select whether to execute the current policy.

☐ YES

☐ Generate By AI

05-25 15:30:59 | Time taken 1875.7 s

Auto Candidates cells

STEP-1 Query Cell Information				
A total of 152 LTE cells and 138 NR cells are available in the region. There are 152 LTE cells and 138 NR cells with engineering parameters. Cells are filtered based on the criteria [RAT: NR, Coverage type: OUTDOOR].Among them, the number of NR cells: 138.				
STEP-2 KPI Analysis				
Based on the PM data in the past 7 days, the basic KPI information for this region is as follows:				
RAT	Data Level	Average Users(pcs)	PRB Utilization(%)	Average User Downlink Throughput(Mbps)
NR	Hour level maximum value	10.06	8.17	143.24
NR	Day level average value	6.97	6.92	128.09
STEP-3 Basic Layer and Capacity Layer Judgment				
The capacity of the basic layer is abnormal. Check whether the engineering parameters exist. If the engineering parameters are normal, contact Huawei technical support.				
STEP-4 Busy-Idle Network Statistics				
Based on PM data, the peak/off-peak periods for this region are as follows:				
RAT	Busy Hour	Idle Hour		
NR	07:00~23:59	00:00~06:59		
STEP-5 Strategy Recommendation				
1. Target gain percentage:5.0% 2. Percentage of gain estimation result:0.0% 3. Estimated throughput impact percentage:0.0% 4. A total of 263 policies are recommended. The recommended features and key parameters are as follows:				

Auto suggest
advice/parameters

The system will perform intent translation, automatically provide candidate cells based on the input intent, create tasks, and then generate energy-saving strategies/parameters.



Intent Translation

Service Capability	Weight	Question	√ Option A	√ Option B	Option C	Option D
Intent Translation	15%	How does the System translate the RAN Energy saving intent to the RAN energy saving related control information? RAN energy saving intent includes RAN energy saving targets and performance targets (including but not limited to RAN UE Throughput Targets). Note1: Human defined policies can overwrite the automated selection of energy saving candidate objects	Based on RAN energy saving Intent defined by Human, the System intelligently selects candidate energy-saving objects (e.g. NE/CELL) and generates the RAN energy saving related control information, without Human Intervention. The system intelligently explores the energy saving gains and performance impacts to support human continuous adjustment of intent targets to achieve optimal energy saving effect and performance.	The System automatically generates RAN energy saving related control information through the execution of predefined Rules. Human manually select candidate energy-saving objects (e.g. NE/CELL) and confirm the RAN energy saving related control information based on the RAN energy saving intent.	RAN energy saving related control information are manually defined through basic templates	RAN energy saving related control information are manually defined based on expertise

Evidence :

The screenshot displays a 'Data Management' interface. On the left, a sidebar shows 'Service Type' as 'Network Optimization' and a selected item 'WLTaihanMAE'. The main area is divided into two sections: 'OSS Info' and 'NE List'.

OSS Info: This section contains configuration details for the OSS system. It includes fields for Name (WLTaihanMAE), Networking mode (Non-DR system), Connection status (Connect), Connection port (10511), Partition info (ostunnel-service-134-0), Description, FTP mode (N/A), Version (MAEV100R026), IP address (10.222.15.68), User name (powerstopt), Connection mode (SSL), Connection info (OSS was reconnected automatically by system), Partition IP address (10.222.19.104), FTP type (SFTP), FTP port (22), and OSS ID (18). Buttons for 'Modify', 'Delete', 'Synchronize OSS', and 'Reconnect Connection Range' are present.

NE List: This section displays a table of Network Elements (NEs). The table has columns for NE Name, NE FDN, NE Version, NE Type, Status, NE Partition, NE Partition IP, CM Partition, and DB Partition. The table shows several entries, all with a status of 'Connected'.

NE Name	NE FDN	NE Version	NE Type	Status	NE Partition	NE Partition IP	CM Partition	DB Partition
D-48	05S18	BTS3900 V100R021C10S...	BTS3900	Connected	opt	10	optom	172.2
D-4	02	05S18	BTS5900 V100R021C10S...	Connected	opt	10	optom	172.2
An	336	05S18	BTS5900 V100R021C10S...	Connected	opt	10	optom	172.2
BN	05S18	BTS5900 V100R021C10S...	BTS5900 5G	Connected	opt	10	optom	172.2
BN	34	05S18	BTS3900 V100R021C10S...	Connected	opt	10	optom	172.2
ML	RTH...	05S18	BTS3900 V100R021C10S...	Connected	opt	10	optom	172.2

At the bottom of the NE List section, it indicates 'Total records: 4163' and provides pagination controls (10/page, 1, 2, 3, 4, ..., 417, 1, Go).

Site is automatically connected by MAE, and environment data (include site location) is automatically obtained.



Intent Fulfilment evaluation

Service Capability	Weight	Question	✓ Option A	Option B	Option C	Option D
Intent Fulfilment evaluation	10%	How does the System evaluate RAN energy saving intent fulfilment?	The system automatically evaluates and generates an intent fulfilment report including targets fulfilment status, based on intent.	The System automatically evaluates and generates an intent fulfilment report (including targets fulfilment status) based on intent, but human confirms the evaluation result	The System provides Intent fulfilment status. Confirmation and report compilation are done by human	Intent Fulfilment is manually evaluated

Evidence :

The intent to save energy can automatically provide an estimated evaluation of energy-saving gains and the impact on KPIs.



RAN Energy Saving Information Collection

Service Capability	Weight	Question	√ Option A	Option B	Option C	Option D
RAN Energy Saving Information Collection	10%	How does the System collect RAN energy saving related information? RAN energy saving related information includes but not limited to energy efficiency measurements, e.g. Data Volume measurement and performance data, network configuration data e.g. energy saving state and environment data e.g. electronic map, site location.	The System continuously collects RAN energy saving related information, without human intervention Note: All data required is automatically collected, no need for additional manually collected data.	The System continuously collects RAN energy saving related information, and may require human intervention (e.g.: for data quality checks)	The System continuously collects RAN energy saving related information based on predefined rules.	RAN energy saving related information are collected based on expertise

Evidence :

Engineering parameters of microphones can be automatically collected in all three scenarios.

These auto collection procedures can be applied to all the three sub-scenarios

iMasterMAE Common

Security Log System Help
Q admin ?

/ Common / Home Engineering Parameter Management

Engineering Parameter Sync

Select Data Source: Customer Engineering Parameter System

Sync Source Settings

- IP Type: ☒ IPv4 ☐ IPv6
- IP Address:
- Port:
- Save Path:

- Protocol: ☐ FTP ☒ SFTP
- Authentication Mode: ☒ Password Authentication ☐ Public Key Authentication
- User Name:
- Password:
- Public key for Authenticating the Customer Engineering Parameter System:

[Advanced SSH Algorithm Suite Settings](#)

[Immediate Sync.](#)

Scheduled Sync Settings

Scheduled Sync Switch: ☒

Channel Disconnection Alarm: ☐

Sync Type: Incremental

Period: 1 day

Time: 04:00:00 X Ensure that the engineering parameter file of the current day has been generated before this time

Click here to test the connection.

[Connection Test](#)

PM Data

Trace Data

UMTS MRs

UMTS CHRs

LTE SIGs

Export

Refresh

Filter

Clear Filters

Export

View Data Diagnosis

☐	NE Name TL	Status TL	File Period (... TL	Number of Files TL	Start Time of Statistics ⌚
☐	8I	NORMAL	60	1	2026-05-11 08:00:00
☐	D	NORMAL	60	1	2026-05-11 08:00:00
☐	IV	NORMAL	60	1	2026-05-11 08:00:00
☐	8I	NORMAL	60	1	2026-05-11 08:00:00
☐	JL	NORMAL	60	1	2026-05-11 08:00:00
☐	A	NORMAL	60	1	2026-05-11 08:00:00
☐	A	NORMAL	60	1	2026-05-11 08:00:00
☐	VI	NORMAL	60	1	2026-05-11 08:00:00
☐	Er	NORMAL	60	1	2026-05-11 08:00:00
☐	SI	NORMAL	60	1	2026-05-11 08:00:00
☐	SI	NORMAL	60	1	2026-05-11 08:00:00

Total records: 52512

100/pa...

1 2 3 ... 526

Go



RAN Energy Saving Information Collection

Evidence :

Data Management

Service Type: Network Optimizati...

WLTaishanMAE

OSS Info

Name: WLTaishanMAE
Networking mode: Non-DR system
Connection status: Connect
Connection port: 10511
Partition info: osstunnelservice-134-0
Description:
FTP mode: N/A
Version: MAEV100R026

IP address: 10.2.
User name: powerstaropt
Connection mode: **SSL**
Connection info: OSS was reconnected automatically by system.
Partition IP address: 10.2.
FTP type: **SFTP**
FTP port: 22
OSS ID: 18

NE List | NE Synchronization Monitoring | Synchronization History | Data Monitoring Info | Trace Server Info | OSS Slave Board Info

	NE Name	NE FDN	NE Version	NE Type	Status	NE Partition	NE Partition IP	CM Partition	DB Partition
	D-I	T_48...	OSS18:	BTS3900 V100R021C10S...	Connected	opteti	10	optcm	172.
	D-I	32	OSS18:	BTS5900 V100R021C10S...	Connected	opteti	10	optcm	172.
	Av	36	OSS18:	BTS5900 V100R021C10S...	Connected	opteti	10	optcm	172.
	BH		OSS18:	BTS5900 V100R021C10S...	Connected	opteti	10	optcm	172.
	BH	34	OSS18:	BTS3900 V100R021C10S...	Connected	opteti	10	optcm	172.
	MI	TH-	OSS18:	BTS3900 V100R021C10S...	Connected	opteti	10	optcm	172.

Total records: 4163

10/page 1 2 3 4 ... 417 1 Go

Go to Settings to activate Windows.

Site is automatically connected by MAE, and environment data (include site location) is automatically obtained.



RAN Energy Saving Issues Identification

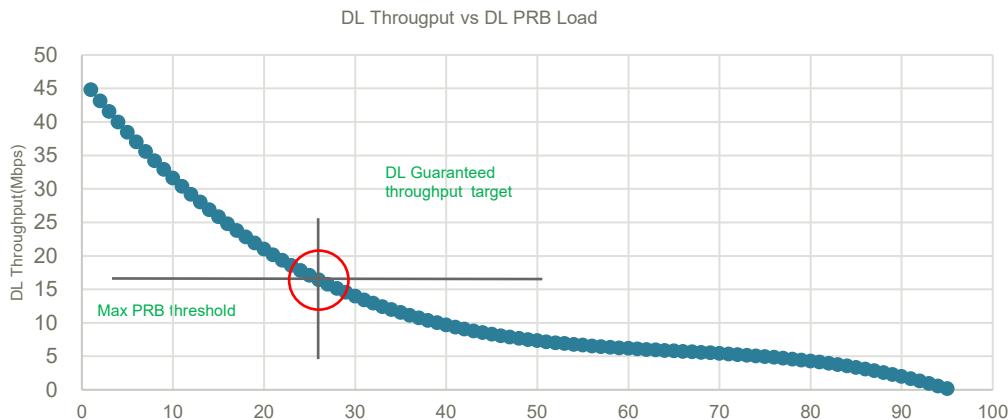
Service Capability	Weight	Question	✓ Option A	Option B	Option C	Option D
RAN Energy Saving Issues Identification	10%	How does the System identify RAN energy saving issues? RAN energy saving issues include but not limited to insufficient energy saving issue, high energy consumption, low energy efficiency and performance issues caused by energy savings actions	The System intelligently identifies energy saving issues, without human intervention.	The System intelligently identifies energy saving issues, and may require human intervention for issue confirmation	The System identifies energy saving issues based on predefined rules.	Energy saving issues are manually identified.

Evidence :

➤ RAN Energy Saving Issues --Insufficient energy saving issue

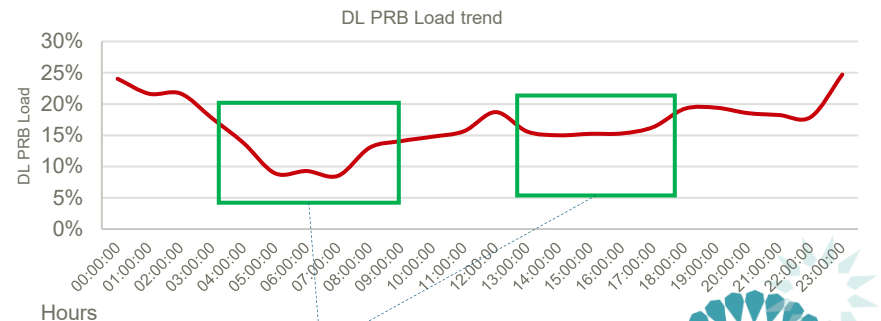
• 1st step: MAX LTE PRB threshold calculation for LNR carrier shutdown

The system build an AI model for DL PRB load and average DL throughput for LTE coverage cell in each LNR co-coverage sector, based on the DL Guaranteed throughput target input by user, the system calculate the max LTE PRB load threshold.

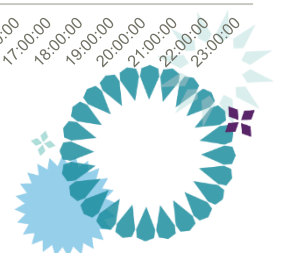


• 2nd step: Energy saving objects identification which has proper time windows

With the sector's max PRB load threshold ,the system automatically identifies multiple proper time windows of energy saving based on the analysis in DL PRB load and user number trends with PM data at the minimum granularity (15/30/60 minute) that PM is available from the source. **If any proper time window is found, the sector is identified to have insufficient energy saving issues.**



All proper time window which has insufficient energy saving issue

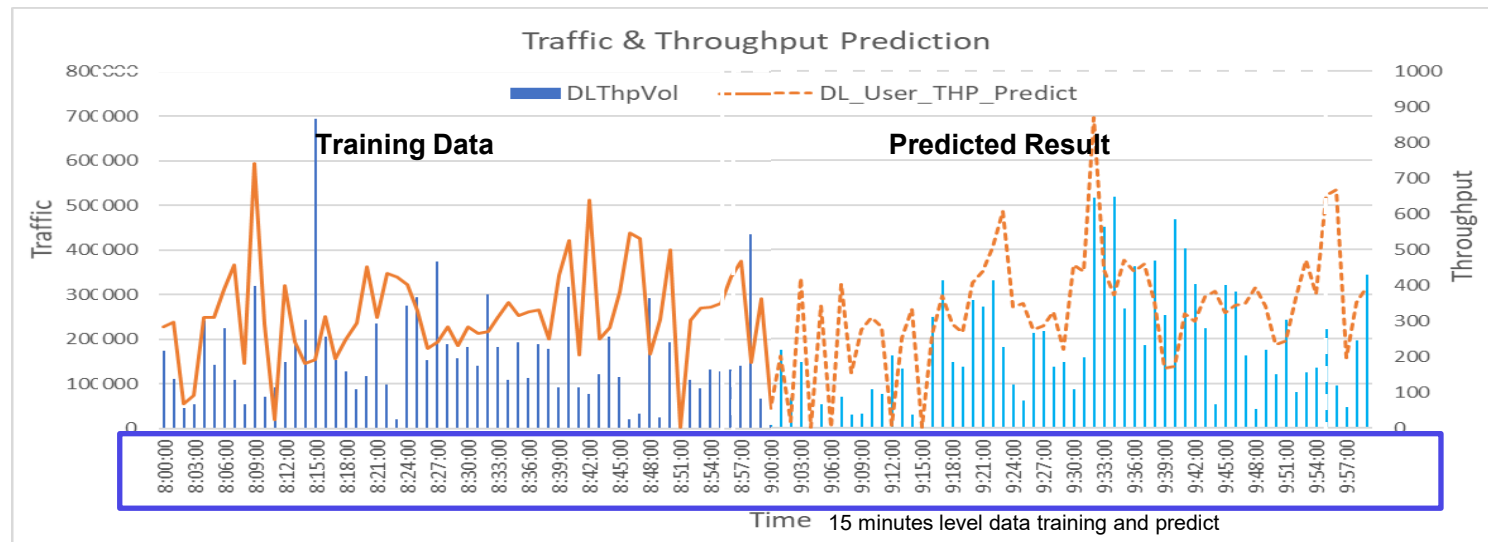


RAN Traffic & Performance Prediction

Service Capability	Weight	Question	✓ Option A	Option B	Option C	Option D
RAN Traffic & Performance Prediction	10%	How does the System predict traffic load and network performance that can be used for RAN energy saving solutions? Traffic load includes but not limited to PRB utilization rate. Network performance includes but not limited to RAN UE throughput	The System intelligently predicts traffic load & network performance that can be used for energy saving solution at the minimum granularity (i.e. at least support 1 hour) that RAN performance data is available from the source, without human intervention.	The System intelligently predicts traffic load & network performance that can be used for energy saving solution, and may require human confirmation.	The System predicts traffic load & network performance that can be used for energy saving solution, based on predefined rules.	Traffic load & network performance trend need to be manually established based on human expertise or through the execution of manual written procedures.

Evidence :

This evidence proves the prediction capability for NR sites

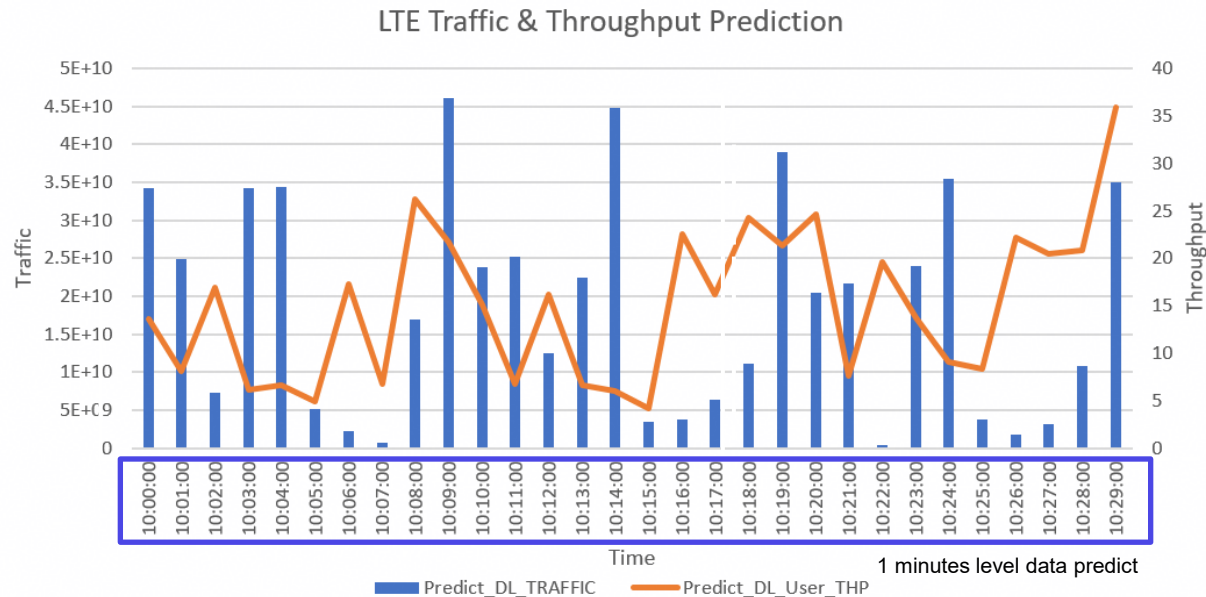


In all three sub-scenarios, the algorithm extracts minute-level KPI data, such as traffic and throughput, based on collected data. Then, it uses the minute-level data to train indicator models and predict the traffic and throughput change follow the auto generate policy. If some power saving features need hourly traffic, the system will combine the minutes level traffic to hourly traffic.



RAN Traffic & Performance Prediction

Evidence :



This is the LTE traffic and throughput prediction data.

These two graphs together prove that the prediction is done in the inter-RAT (LNR) context.



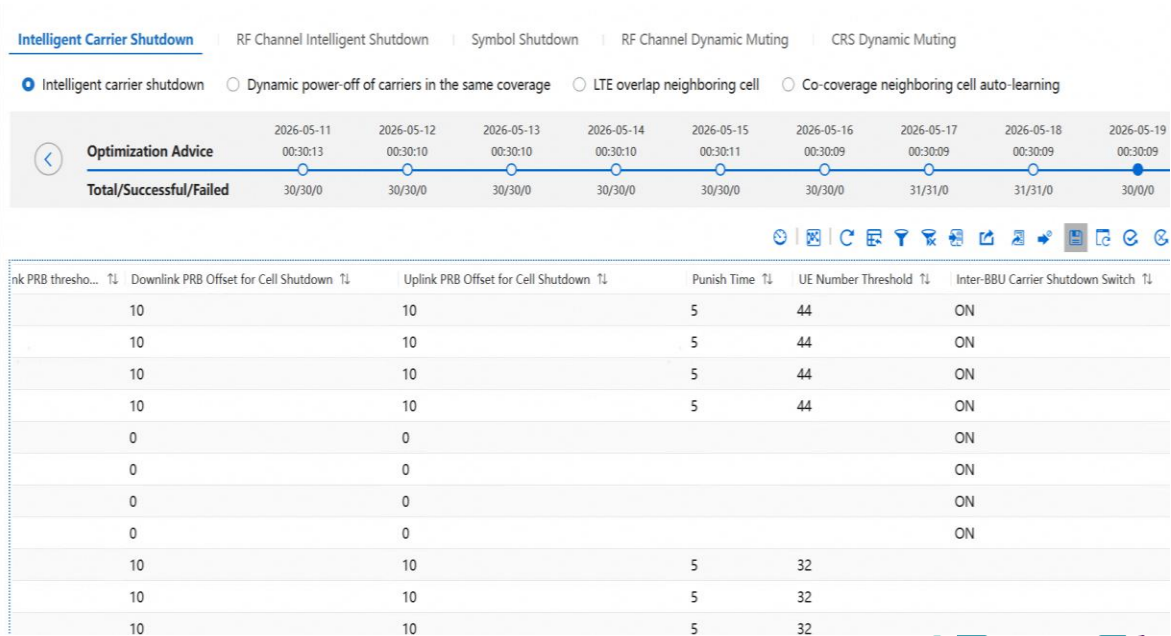
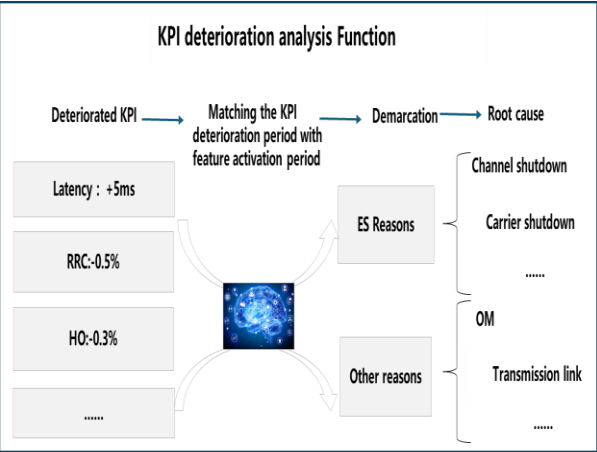
RAN Energy Saving Issues Demarcation & Root Cause Analysis

Service Capability	Weight	Question	✓ Option A	Option B	Option C	Option D
RAN Energy Saving Issues Demarcation & Root Cause Analysis	10%	How does the System demarcate energy saving & performance issues caused by energy saving actions and analyze their root cause (including, but not limited to performance issues caused by which energy saving actions)?	The System intelligently demarcates energy saving issues & performance issues caused by energy saving actions, and analyze their root cause, without human intervention	The System intelligently demarcates energy saving issues & performance issues caused by energy saving solutions, and may require human intervention to confirm the root causes	The System identifies energy saving issues, caused by energy saving solutions, based on predefined rules The root cause is analyzed by expert	Energy saving & performance issues, caused by energy saving solution, demarcation and root cause analysis are performed manually

Evidence :

➤ Performance issues caused by energy saving

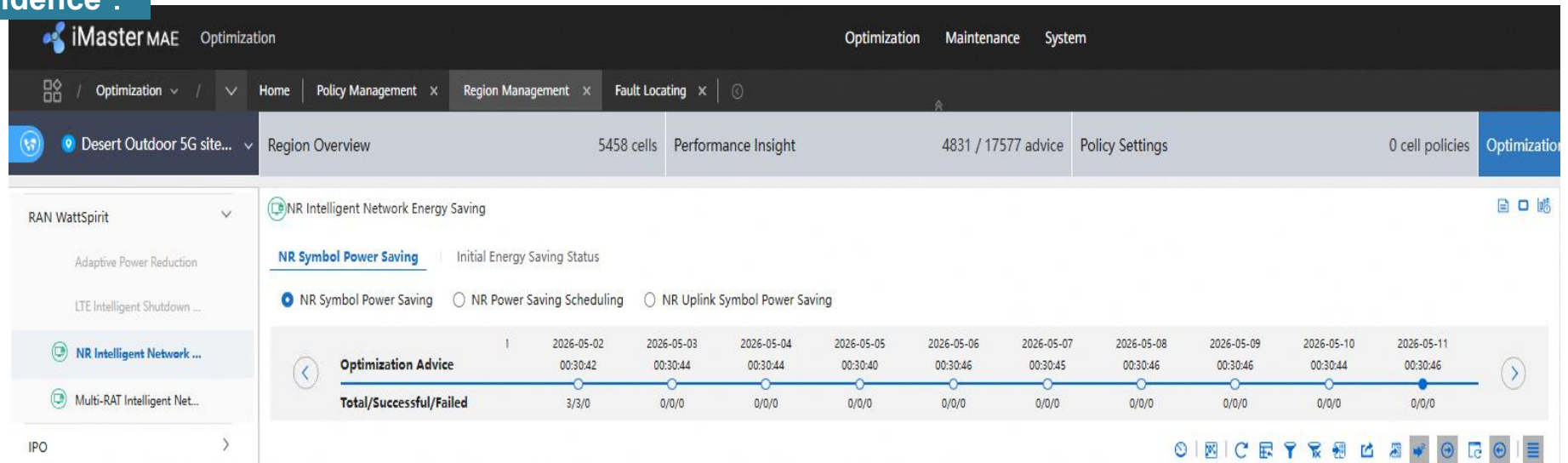
Cell: BNF 4_A, Only power saving scripts run, so handover rate degradation was caused by power saving , the scripts rollback 1 day later.



RAN Energy Saving Issues Demarcation & Root Cause Analysis

Service Capability	Weight	Question	✓ Option A	Option B	Option C	Option D
RAN Energy Saving Issues Demarcation & Root Cause Analysis	10%	How does the System demarcate energy saving & performance issues caused by energy saving actions and analyze their root cause (including, but not limited to performance issues caused by which energy saving actions)?	The System intelligently demarcates energy saving issues & performance issues caused by energy saving actions, and analyze their root cause, without human intervention	The System intelligently demarcates energy saving issues & performance issues caused by energy saving solutions, and may require human intervention to confirm the root causes	The System identifies energy saving issues, caused by energy saving solutions, based on predefined rules The root cause is analyzed by expert	Energy saving & performance issues, caused by energy saving solution, demarcation and root cause analysis are performed manually

Evidence :



Export the root cause data of energy-saving features in the graphical interface.

KPIs that deteriorate due to automatic optimization of energy saving functions.

For all sub-scenarios, if the KPI deterioration is caused by the optimization of the automatic energy saving feature, the system automatically provides the root cause. The system will then perform a rollback to improve the KPIs.



Solution Generation

Service Capability	Weight	Question	✓ Option A	Option B	Option C	Option D
Solution Generation	15%	How does the System generate the recommended RAN energy saving solutions to solve the identified energy saving issues?	The System intelligently generates energy saving solutions, adjusted to adapt to RAN Traffic & Performance changes, without human intervention Note: the adjustment of the energy saving solutions needs to be performed in hour's level time period (i.e. at least support 1 hour).	The System intelligently generates energy saving solutions, and may require human confirmation	The System generates energy saving solutions based on predefined rules, and requires human intervention.	Energy saving solutions are manually proposed based on expertise.

Evidence :

Optimization parameters

NO.	Parameters	Optimization Target	Optimization Target Constraint
1	L2 scheduling parameter	Throughput	Traffic
2	L3 handover parameter	Throughput	Traffic
3	Power parameter	Energy	Throughput&Traffic&Coverage
4	RF parameter	Coverage	Throughput&Traffic&Energy&Use r

	MaxPower	CovInterFreqA2RsrpThld	E-AZIMUTH	E-TILT
Initial	42	-97	0	3
Solution-25	33	-97	5	3
Solution-100	36	-94	15	6
Solution-225	39	-91	10	5
Solution-350	39	-94	10	5

The system generates multiple rounds of solutions iteratively using AI optimization algorithms based on predicted traffic load and network performance, combined with customer demand scenarios. The final solution is selected based on the benefits of each option. The entire process is fully automated and requires no manual intervention for the intra-RAT intra-frequency multi-site energy saving scenario, and intra-RAT inter-frequency multi-site energy saving scenario and inter-RAT multi-site energy saving scenario(LNR)



Solution Evaluation & Decision Making

Service Capability	Weight	Question	✓ Option A	Option B	Option C	Option D
Solution Evaluation & Decision Making	10%	How does the System evaluate energy saving solutions and decide on the best solution to be implemented?	The System intelligently evaluates energy saving solution when the recommended solutions are generated, and selects the best solution, without human intervention	The System intelligently evaluates energy saving solution and selects the best solution, and may require human confirmation	The System evaluates energy saving solution and selects the best solution based on predefined rules	Energy saving solutions are evaluated and decided based on manual expertise.

Evidence :

For the intra-RAT intra-frequency multi-site energy saving scenario, and intra-RAT inter-frequency multi-site energy saving scenario and inter-RAT multi-site energy saving scenario(LNR):

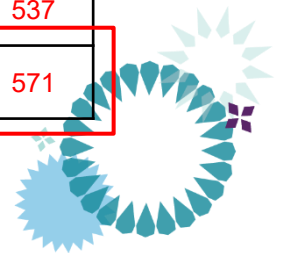
- When generating alternative solutions, the algorithm invokes the simulation prediction module to simulate the parameters of each solution, thereby generating predicted values for corresponding KPIs (such as downlink throughput, traffic, weak coverage ratio, etc.).
- The algorithm then calculates and records the comprehensive score of each alternative solution based on the predicted values of key KPIs and their weights.
- Example of Candidate Solution Evaluation (Cell: B1_A)

Parameters	MaxPower	CovInterFreqA2RsrpThld	E-AZIMUTH	E-TILT
Initial	42	-97	0	3
Solution-25	33	-97	5	3
Solution-100	36	-94	15	6
Solution-225	39	-91	10	5
Solution-350	39	-94	10	5

KPI Simulation

Results	Energy Consumption	User DL Throughput	Traffic	Poor Coverage Ratio	fitness
Initial	0.325	213.12	555.1	0.81%	0
Solution-30	0.296	193.45	518.4	0.72%	492
Solution-125	0.311	205.67	507.6	0.85%	518
Solution-200	0.318	198.90	545.9	0.67%	537
Solution-385	0.302	209.32	538.2	0.58%	571

Evaluation & Select The Best Solution

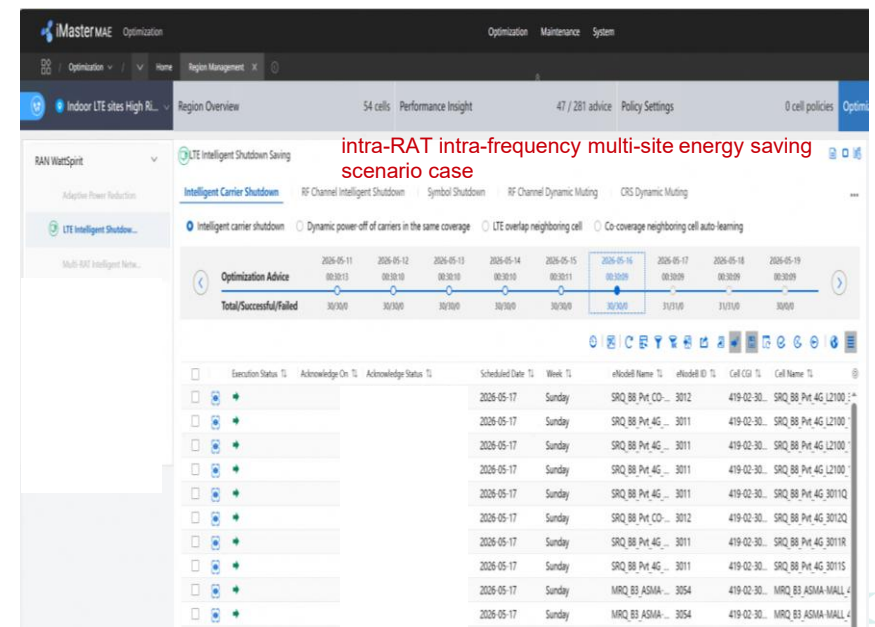
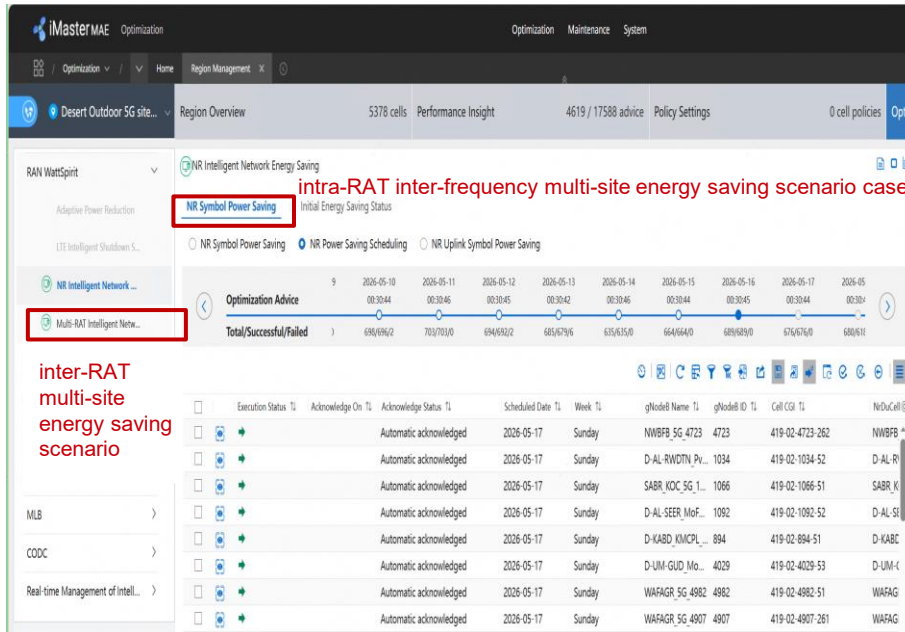


Solution Evaluation & Decision Making

Service Capability	Weight	Question	✓ Option A	Option B	Option C	Option D
Solution Evaluation & Decision Making	10%	How does the System evaluate energy saving solutions and decide on the best solution to be implemented?	The System intelligently evaluates energy saving solution when the recommended solutions are generated, and selects the best solution, without human intervention	The System intelligently evaluates energy saving solution and selects the best solution, and may require human confirmation	The System evaluates energy saving solution and selects the best solution based on predefined rules	Energy saving solutions are evaluated and decided based on manual expertise.

Evidence :

- The algorithm makes decisions based on fitness, selecting the solution with the best fitness as the final advice and displaying it on the GUI.



Solution Implementation

Service Capability	Weight	Question	√ Option A	Option B	Option C	Option D
Solution Implementation	10%	How does the System implement solution that can resolve identified energy saving issues?	The System implements solution without human supervision	The System implements solution under human supervision	Solution implementation is entirely manual.	

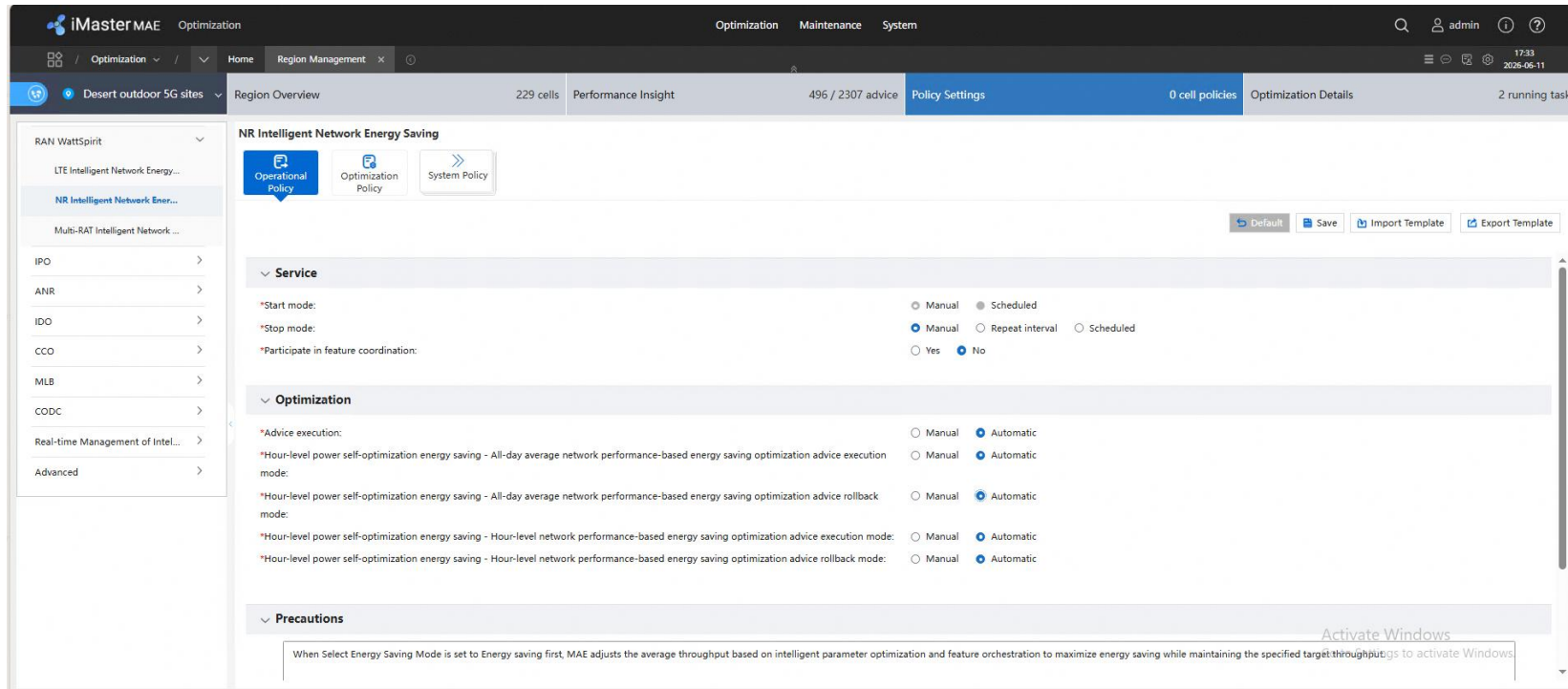
For the intra-RAT intra-frequency multi-site energy saving scenario, and intra-RAT inter-frequency multi-site energy saving scenario and inter-RAT multi-site energy saving scenario(LNR), the system will automatically implement the power saving features scripts to the sites and cells based on the parameter setting.

The screenshot displays the iMaster MAE interface for configuring energy saving scenarios. The top navigation bar includes tabs for 'Optimization', 'Maintenance', and 'System'. The main content area is divided into several sections:

- Left Sidebar:** Contains navigation options such as 'LTE Intelligent Network Energy Saving', 'NR Intelligent Network Energy Saving', and 'Multi-RAT Intelligent Network Energy Saving'. A red box highlights the 'Multi-RAT Intelligent Network Energy Saving' option, with a red arrow pointing to the 'Inter-RAT multi-site energy saving scenario' label.
- Top Bar:** Displays various metrics and settings, including 'Desert Outdoor 5G site...', 'Region Overview', '4548 cells', 'Performance Insight', '4831 / 17577 advice', 'Policy Settings', '0 cell policies', 'Optimization Details', and '2 running'.
- Main Content Area:**
 - Service Tab:** Shows settings for 'LTE mode', 'NR mode', and 'Stop mode'. A red box highlights the 'Optimization' tab, with a red arrow pointing to the 'Set automatic run solution scripts' button.
 - Optimization Tab:** Displays various settings for energy saving, including 'Advice execution mode', 'Adaptive Power Reduction advice execution mode', 'Adaptive Power Reduction advice rollback mode', 'Experience-based collaborative energy saving advice execution mode', and 'Experience-based collaborative energy saving advice rollback mode'.
- Bottom Section:** Shows a table of optimization results, including columns for 'Optimization Advice', 'Success/Failure', and 'Execution Time'.

Solution Implementation

Evidence :



- MAE provides two modes: automatic mode and manual mode. In automatic mode, no manual intervention is required, and this mode is used when energy saving is enabled on the entire network.
- The manual mode is used for initial verification of a small number of sites and is not used for commercial use.
- In Kuwait Zain, the automatic mode has been used for commercial use on the entire network. Therefore, the automatic mode is used.



