



User Manual for Online Benchmarking Platform

Author: RMSI

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1. INTRODUCTION

The Online Benchmarking Platform (OBM) will be used for strategic, tactical & operational planning and the development of performance improvement plans. The Online Benchmarking Platform can be foreseen as a robust system, in which data input will be possible, support the planning, implementation, analysis report generation and monitoring of multi-objective activities. It will perform the functions of-

- Data Input Interface related to Activity
- Data Verification
- Monitoring Interface
- Data reporting tool with external format

2. GLOSSARY

S. No.	TERM	DESCRIPTION
1	PPA	Pacific Power Association
2	OBM	Online Benchmarking Platform
3	ToR	Terms of Reference
4	UNA	User Needs Assessment
5	HTTP	Hypertext Transfer Protocol
6	HTTPS	Hyper Text Transfer Protocol Secure
7	URL	Uniform Resource Locator

3. FUNCTIONAL DETAILS & HOW TO USE

User will first log in to the application and has to enter the URL<> in the web browser (Only on chrome and Mozilla).Then user will see the login page having following fields.

- Username
- Password
- Login button
- Register and forgot password
- Contact Information and Useful Links

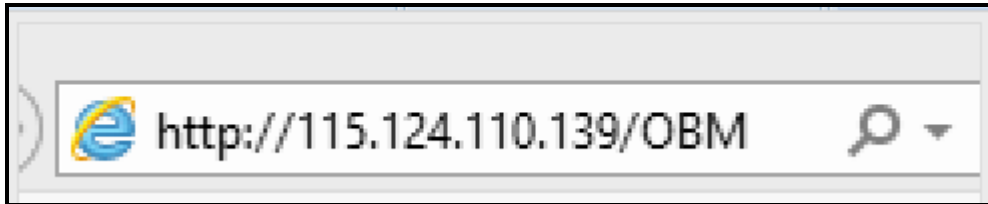


Figure 1: URL

I. Login Page

Then application will initiate the OBM application with a login screen to every user of the application. User will be required to enter their credentials (user id and password) in order to access the application based on the assigned role(s).

OBM User will be authenticated through a login and password, which will be entered in the database through new user request. New user request will be verified through department hierarchy by admin. All the stages in the flow will have specific login controls. Each OBM user will have a unique login ID and password. This will also provide controlled, authorized access rights to a specific stage and give functionality to provide access rights based on designation to different department/Organization users.

Manage Users: For registering new user to access, OBM Application will provide the appropriate authentication by OBM administrator.

Online Benchmarking Data Submission Platform
Pacific Power Association (PPA)

Welcome to
Online Benchmarking Data Submission Platform

Online Benchmarking Data Submission Platform

The Pacific Power Association (PPA) is the regional organization representing 25 electric power utilities in 20 Pacific Islands Countries and Territories (PICTs) in energy for. At its Annual Conference held at the Warwick Hotel on the Coral Coast in Fiji in August 2006, the Board resolved to recommence the Regional Power Utilities Benchmarking which had started under ADB funding in 2000.

In August 2010, the PPA, SPC, and PIAC (now PIC, PRIF Coordination Office) signed a Memorandum of Understanding (MOU) to establish a sustainable benchmarking system for the power utilities of the Pacific Island Countries and Territories (PICTs). Within the Council of Regional Organisations of the Pacific (CROP), the PPA is the lead CROP implementing agency responsible for electric power assistance activities, with twenty five member utilities among the PICTs.

Recent studies in the Pacific region have identified the poor quality of national and regional energy sector data as a constraint to effective analyses of issues, opportunities for improved decision-making and to future improvement. This is true for energy broadly and for the electric power sector. There is limited reliable, consistent, up-to-date information on the technical and economic performance of the region's power utilities and no time-series data allowing comparisons over time. This constrains attempts to improve services, and document the improvements, within the power sector.

This benchmarking initiative is linked to the Framework for Action on Energy Security in the Pacific (FAESP), a policy and strategy for energy sector action at the regional level, which was endorsed by regional leaders in 2010, and which recognizes the development of improved energy data as a high priority at both national and regional levels. Accordingly, data collected in the benchmarking exercises was designed in part to provide selected power sector data for the SPC's initiatives to improve energy data.

The endorsement by regional leaders in 2010 of the Framework for Action on Energy Security in the Pacific, a policy and strategy for energy sector action at the regional level, mandated the PPA to undertake a regional benchmarking exercise for all member Utilities.

Improvements have been made to improve benchmarking process, which in turn should allow better management decisions and help utilities become more commercially sustainable over time. There are three interrelated, overlapping areas in which recommendations have been made and improvements implemented in three interlinking areas of improving (a) Pacific power utility performance, (b) quality of information in future benchmarking and, (c) usefulness of benchmarking to utilities.

The Online Benchmarking Portal transitions the manual process of submitting the utility data using a Excel spreadsheet to a portal such that individual utility results can be reviewed immediately and to improve the vetting and accuracy of data.

Login

Username
ppaex

Password

Login

Register ? Forgot Password ?

Contact Information

Pacific Power Association
Naibati House
Goodenough Street,
Suva, Fiji Islands.
Email: ppa@ppa.org.fj
Website : https://www.ppa.org.fj
Tel: (679) 3306-022

Useful Links

- PPA Strategic Plan Final
- Benchmarking Summary Report 2015
- Benchmarking Summary Report 2016
- Benchmarking Summary Report 2017

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129.9 134.69 136.24 131.82 135.98 8.019 79

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Figure 2: Login Page

II. Home Page

Upon successful login, a Home page will appear. Home page is the initial page of an OBM website, the 'point of entry' to all the information stored within. It's similar to the front page of a newspaper. Events, news and picture's and other menu bars are visible in this home page. User can navigate to other pages through menu bar or webpage link.

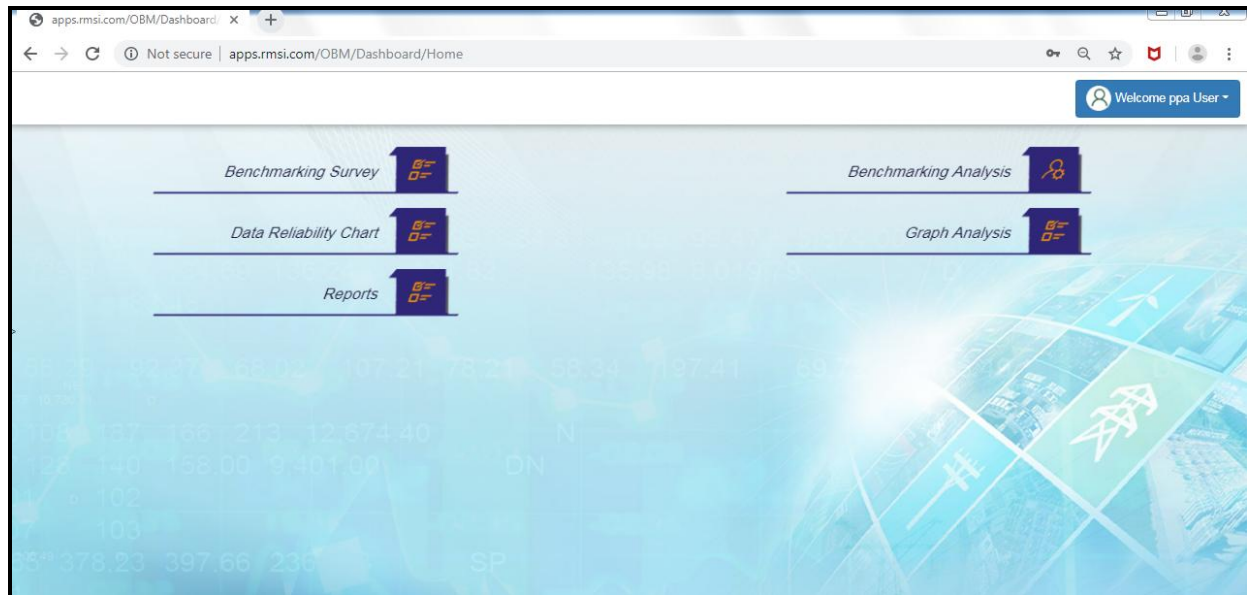


Figure 3: Home Page

III. Change Password, Edit Profile and Log Out

User can change their profile and change their password also. After all the work is done user can logout through these functionalities:

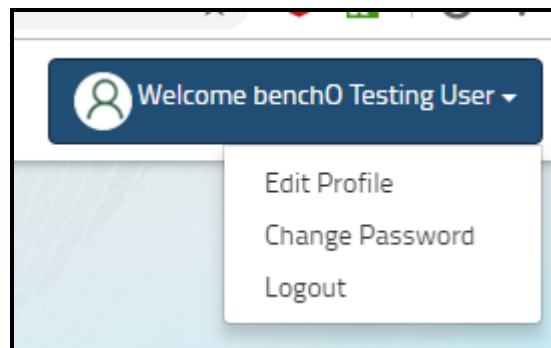


Figure 4: Logout, Change Password

IV. Benchmarking Survey

1. Click on 'Benchmarking Survey'.
2. Application will open a page having Analysis Year, Analysis Action, and Analysis Utility with 'Save' button.
3. Select Year from 'Analysis Year'.
4. Select Action i.e. Fill Survey.
5. Select 'Utility' among all utilities.
6. Click on 'Save' button.



Figure 5: Benchmarking Survey

Figure 6: Analysis Year, Analysis Action, Analysis Utility



Figure 7: Modules

V. Questionnaire

1. Click on 'Questionnaire'.
2. Application will open questionnaire forms named as:
 - Introductory Questions
 - Generation
 - Distribution and Customer Outages
 - Human Resources/ Safety
 - Customers/ General
 - Finance
 - Generation Expenditure
 - Transmission/ Distribution Expenditure
 - Overheads/ Other Expenditure

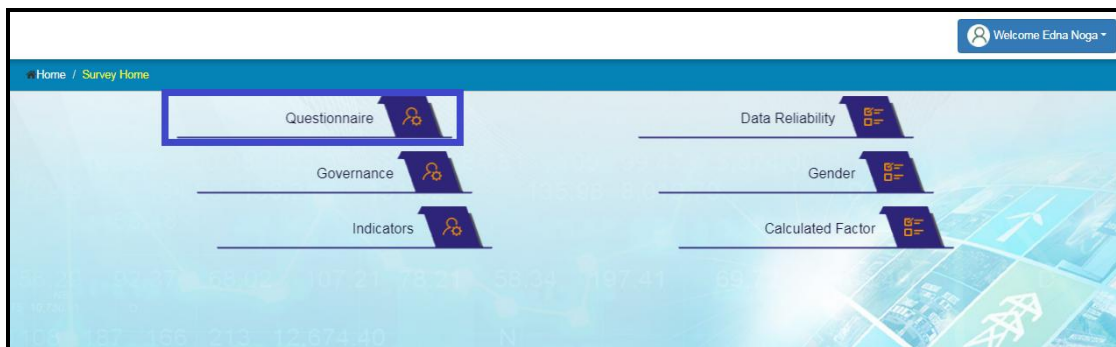


Figure 8: Questionnaire



Introductory Questions:-

1. Click on 'Introductory Questions'.
2. Application will open a form with personal information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Next' button.
6. Application will save the form and move to the next questionnaire form i.e. 'Generation'.

Questionnaire > Data Reliability > Governance > Gender > Calculated Factors > Indicators >

Introductory Questions

Information on person providing the information

*Completed by Benchmarking Liaison Officer (name)

*Position / Title

*Endorsed by CEO (name)

*Country or territory

*Name of utility

*Postal address

*E-mail address

*Back up e-mail address

*Telephone number

Skype address (if any)

Benchmarking Period

*Start Date for Benchmarking Data Collection Period

*End Date for Benchmarking Data Collection Period (Benchmarking Period)

*Date questionnaire completed

*Currency Used by Utility to Report Costs

Next **Save as Draft**

Figure 9: Introductory Questions



Generation:-

1. Click on 'Generation'.
2. Application will open a form with generation information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Next' button.
6. Application will save the form and move to the next questionnaire form i.e. 'Transmission'.

Wizard Benchmarking Year: 2018 / Utility Name: ASPA

Questionnaire | Data Reliability | Governance | Gender | Calculated Factors | Indicators

Introductory Questions

Generation

	Main grid 1	Grid 2	Grid 3	Others	Comments
1 *Name of the grid ⓘ	Main Grid 1	Grid 2	Grid 3	1	Generation
2 *Total Utility Generation(MWh) ⓘ	1	2	3	2	Generation
3 *Total IPP Generation Purchased(MWh) ⓘ	4	5	6	3	Generation
4 *Maximum Demand / Peak Generation(MW) ⓘ	7	8	9	4	Generation
5 *Minimum Demand Generation(MW) ⓘ	10	11	12	5	Generation
6 *Guaranteed/Contracted IPP Generation Capacity(MW) ⓘ	13	14	15	6	Generation
7 *Generator 1 Nameplate Capacity Rating(MW) ⓘ	16	17	18	7	Generation
7 *Generator 2 Nameplate Capacity Rating(MW) ⓘ	19	20	21	8	Generation
7 *Generator 3 Nameplate Capacity Rating(MW) ⓘ	22	23	24	9	Generation
7 *Generator 4 Nameplate Capacity Rating(MW) ⓘ	25	26	27	10	Generation
7 *Generator 5 Nameplate Capacity Rating(MW) ⓘ	28	29	30	11	Generation

[+ Add New Row](#)

Figure 101: Generation 1

9.1e LNG (kg / tonne) ⓘ

151 152 153 52 kg

10 Total Lubricants Used in Generation (L/ kL / ML) ⓘ

154 155 156 53 L

11 Utility Capacity Hours Out of Service Due to Generation Forced Outage Events (MWh) ⓘ

157 158 159 54

12 Utility Capacity Hours Out of Service Due to Generation Planned Outage Events (MWh) ⓘ

160 161 162 55

13 Utility Capacity Hours Out of Service Due to Generation De-rated Events (MWh) ⓘ

163 164 165 56

14 IPP Capacity Hours Out of Service Due to Generation Forced Outage Events (MWh) ⓘ

166 167 168 57

15 IPP Capacity Hours Out of Service Due to Generation Planned Outage Events (MWh) ⓘ

169 170 171 58

16 IPP Capacity Hours Out of Service Due to Generation De-rated Events (MWh) ⓘ

172 173 174 59

*Note: Generation SAIDI data is recorded under the Distribution Section below.

17 Power Station Usage / Station Auxiliaries (MWh) ⓘ

175 176 177 60

18 *Enabling Framework for Private Sector Participation IPP/ PPA Arrangement? (Y/N) ⓘ

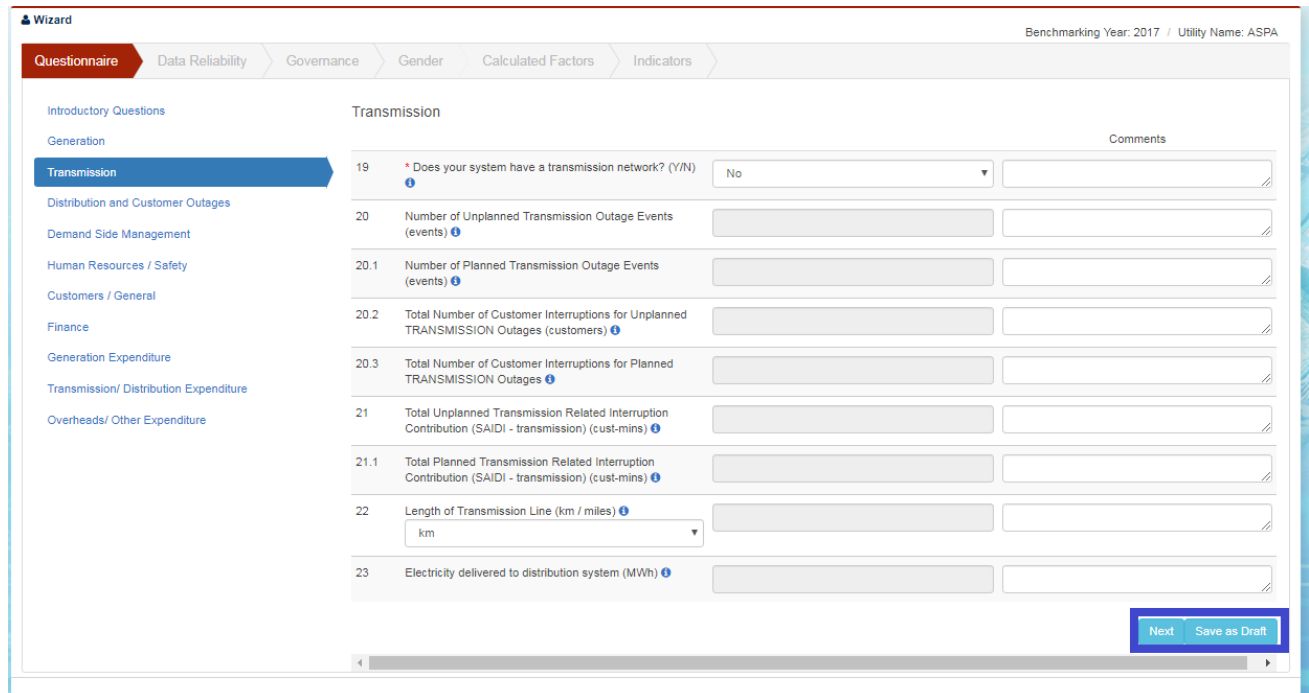
Yes

[Next](#) [Save as Draft](#)

Figure 11: Generation2

Transmission:-

1. Click on 'Transmission'.
2. Application will open a form with transmission information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Next' button.
6. Application will save the form and move to the next questionnaire form i.e. 'Distribution and Customer Outages'.



The screenshot shows the 'Transmission' questionnaire form. The form is titled 'Transmission' and is part of a wizard. It contains several questions related to transmission network information, including the number of unplanned and planned transmission outage events, total number of customer interruptions for unplanned and planned transmission outages, total unplanned and planned transmission related interruption contribution (SAIDI - transmission) in customer minutes, length of transmission line in km or miles, and electricity delivered to the distribution system in MWh. The form has a 'Next' button and a 'Save as Draft' button.

Figure 12: Transmission

Distribution and Customer Outage:-

1. Click on 'Distribution and Customer Outage'.
2. Application will open a form with Distribution and Customer Outage information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Next' button.
6. Application will save the form and move to the next questionnaire form i.e. 'Demand Side Management'.

Wizard Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire Data Reliability Governance Gender Calculated Factors Indicators

Introductory Questions

Generation

Transmission

Distribution and Customer Outages

Demand Side Management

Human Resources / Safety

Customers / General

Finance

Generation Expenditure

Transmission/ Distribution Expenditure

Overheads/ Other Expenditure

Distribution and Customer Outages

			Comments
24	Number of DISTRIBUTION Forced (Unplanned) Outage Events (events) ⓘ	21	
24.1	Number of DISTRIBUTION Planned Outage Events (events) ⓘ	1	
24.2	Number of GENERATION Forced (Unplanned) Outage Events (events) ⓘ	8	
24.3	Number of GENERATION Planned Outage Events (events) ⓘ		
25	Length of Distribution Line (km / miles) ⓘ km	119.066	
26	Total Distribution Transformer Capacity (MVA) ⓘ	75.66	
27	Total Unplanned GENERATION Related Interruption Contribution (SAIDI - generation) (cust-mins) ⓘ	1671890	
27.1	Total Planned GENERATION Related Interruption Contribution (SAIDI - generation) (cust-mins) ⓘ		
27.2	Total Number of Customer Interruptions for Unplanned GENERATION Outages (customers) ⓘ	7857	NEW Qs
27.3	Total Number of Customer Interruptions for Planned GENERATION Outages (customers) ⓘ		NEW Qs
28	Total Unplanned DISTRIBUTION Related Interruption Contribution (SAIDI - distribution) (cust-mins) ⓘ	756087	
28.1	Total Planned DISTRIBUTION Related Interruption Contribution (SAIDI - distribution) (cust-mins) ⓘ	1761	
28.2	Total Number of Customer Interruptions for Unplanned DISTRIBUTION Outages (customers) ⓘ	720	NEW Qs
28.3	Total Number of Customer Interruptions for Planned DISTRIBUTION Outages (customers) ⓘ	4	NEW Qs

Next Save as Draft

Figure 13: Distribution and Customer Outage

**Demand Side Management:-**

1. Click on 'Demand Side Management'.
2. Application will open a form with Demand Side Management information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Next' button.
6. Application will save the form and move to the next questionnaire form i.e. 'Human Resource/ Safety'.

Wizard Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire | Data Reliability | Governance | Gender | Calculated Factors | Indicators

Introductory Questions

Generation

Transmission

Distribution and Customer Outages

Demand Side Management

Human Resources / Safety

Customers / General

Finance

Generation Expenditure

Transmission/ Distribution Expenditure

Overheads/ Other Expenditure

Demand Side Management

Question	Response	Comments
29 * Does the utility actively engage in any demand side management initiatives? (Y/N) ⓘ	Yes	
29a Installing sensors on lighting or other (Y/N)	No	
29b Replacing old inefficient air conditioners with high-efficiency units (Y/N)	No	
29c Performance testing of appliances and equipment (Y/N)	No	
29d Replacing old refrigerators and freezers with new, high-efficiency units (Y/N)	No	
29e Have varying rates for peak and off peak electricity usage (Y/N)	No	
29f Educational program to consumers	No	
29g Other 1 (please specify) ⓘ	Yes	Replacement of customers lights with LED bulbs/tube
29h Other 2 (please specify) ⓘ	Yes	Replacement of HPS street lights with LED street
29i Other 3 (please specify) ⓘ	Yes	
29j Other 4 (please specify) ⓘ	Yes	
29k Other 5 (please specify) ⓘ	Yes	
30 What is the budget for DSM? ⓘ		No dedicated staff to DSM, but incorporated between
30a *Replacing incandescent lighting with compact fluorescent lighting (Y/N)	No	
31 How many employees are engaged in DSM? (employees) ⓘ		
32 Has there been recorded savings by consumers? How much? (MWh (total)) ⓘ		Noted a decrease in the load.
33 What power Quality Standard applies, if any? ⓘ	None	

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Figure 14: Demand Side Management

**Human Resources And Safety:-**

1. Click on 'Human Resource and Safety'.
2. Application will open a form with Human Resource and Safety information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Next' button.
6. Application will save the form and move to the next questionnaire form i.e. 'Customers/ General'.

Wizard Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire Data Reliability Governance Gender Calculated Factors Indicators

Introductory Questions

Generation

Transmission

Distribution and Customer Outages

Demand Side Management

Human Resources / Safety

Customers / General

Finance

Generation Expenditure

Transmission/ Distribution Expenditure

Overheads/ Other Expenditure

Human Resources / Safety

		Comments
34	Total Days Lost Due to Work Injury During Period (excludes contractors) (days) ⓘ	30.88 N/A
35	Number of Lost Time Injuries During Period (excludes contractors) (LTIs) ⓘ	4 N/A
36	Total Number of Employees (excludes contractors) (employees) ⓘ	136
37	Total number of employees in Distribution & Customer Service at Start of Period (employees) ⓘ	50
38	Total number of employees in Distribution & Customer Service at End of Period (employees) ⓘ	45
39	Total Hours Worked (excludes contractors) (hrs) ⓘ	274653
40	Paid Hours Utility Generation Labour (hrs) ⓘ	165370
41	Paid Hours Utility Distribution Labour (hrs) ⓘ	119798
42	Total Paid Hours Employees Including Contractors (hrs) ⓘ	285168

Next Save as Draft

Figure 15: Human Resources And Safety



Customers/General:-

1. Click on 'Customers/ General'.
2. Application will open a form with customer information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Next' button.
6. Application will save the form and move to the next questionnaire form i.e. 'Finance'.

Customers / General

Question ID	Question Text	Answer 1	Answer 2	Answer 3	Answer 4	Comments
43	Electricity Sold (MWh) ⓘ	145225	1253	528	404	
44.1	Total No. of Customers at Start of Benchmarking Period (Main Grid) (connections) ⓘ	11841	NEW Qs			
44.2	Total No. of Customers at End of Benchmarking Period (Main Grid) (connections) ⓘ	11899	NEW Qs			
45.1	Total No. of Customers at Start of Benchmarking Period (Entire System) (connections) ⓘ	12276				
45.2	Total No. of Customers at End of Benchmarking Period (Entire System) (connections) ⓘ	12320				
46	Number of Households Supplied (Domestic Connections) (connections) ⓘ	10701				
47	Total Number of Households in the Country (households) ⓘ	10963				
48	Tariff Schedule / Tariff Table Attached? (Y/N) ⓘ	Yes				
49	Lifeline Tariff Available? (Y/N) ⓘ	No				
50	Maximum Threshold for Monthly Consumption Under Tariff (kWh/mth) ⓘ	240	Select File: Choose Files No file chosen			
<div> <div>Download</div> <div>Download</div> </div>						
51	Total Electricity Billed under Lifeline Tariff (MWh) ⓘ					
52	Total Domestic Electricity Billed (MWh) ⓘ	48864.67				
53	Total Commercial Electricity Billed (MWh) ⓘ	41110.02				
54	Total Industrial Electricity Billed (MWh) ⓘ	26109.33				
55	Total 'Other' Electricity Billed (eg Govt if not included above etc) (MWh) ⓘ	31526.43				
56	Total Unbilled Electricity Usage (MWh) ⓘ					
57	Is the utility self regulated or externally regulated? (self / external) ⓘ	Self regulated				
58	Do you have a maintenance plan for your utility? (Y/N) ⓘ	Yes				

[Next](#) [Save as Draft](#)

Figure 16: Customers/General

**Finance:-**

1. Click on 'Finance'.
2. Application will open a form with finance related information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Next' button.
6. Application will save the form and move to the next questionnaire form i.e. 'Generation Expenditure'.

Questionnaire Data Reliability Governance Gender Calculated Factors Indicators

Introductory Questions

Generation

Transmission

Distribution and Customer Outages

Demand Side Management

Human Resources / Safety

Customers / General

Finance

Generation Expenditure

Transmission/ Distribution Expenditure

Overheads/ Other Expenditure

Finance

		Comments
59	*Depreciation Generation Assets ⓘ	15000000
60	*Depreciation Transmission & Distribution Assets ⓘ	15000000
61	*Other Depreciation ⓘ	15000000
62	*Total Operating Revenue ⓘ	42787182
63	*Total Operating Expenses ⓘ	36306361
64	*Earnings Before Interest and Tax (EBIT) / Operating Profit ⓘ	8988366
65	*Profit After Tax (PAT) / Earnings After Tax (EAT) ⓘ	8988366
66	*Long Term Debt / Non Current Liability ⓘ	57098035
67	*Equity / Net Assets / Capital and Reserves ⓘ	149019650
68	*Non Current Asset at End of Previous Period ⓘ	74521005
69	*Non Current Asset at End of Benchmarking ⓘ	98255493
70	*Current Assets ⓘ	22488004
71	*Current Liabilities ⓘ	15342032
72	*Debtors/Receivables at Period End ⓘ	20083535
73	*Are utility finances independently audited? (Y/N) ⓘ	Yes
74	*What is the accounting standard used by the utility? ⓘ	US GAP

Next Save as Draft

Figure 17: Finance

**Generation Expenditure:-**

1. Click on 'Generation Expenditure'.
2. Application will open a form with generation expenditure related information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Next' button.
6. Application will save the form and move to the next questionnaire form i.e. 'Generation Expenditure'.

Wizard

Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire | Data Reliability | Governance | Gender | Calculated Factors | Indicators

Introductory Questions

Generation

Transmission

Distribution and Customer Outages

Demand Side Management

Human Resources / Safety

Customers / General

Finance

Generation Expenditure

Transmission/ Distribution Expenditure

Overheads/ Other Expenditure

Generation Expenditure

75 *Hydrocarbon Based Fuel & Lubrication Oil Expenditure 26143220

76 *Duty and Taxes on Hydrocarbon Based Fuel & Lubricating Oil 228041

77 *Total Generation O&M Costs (utility) 4537970

78 *Generation Labour 3117625

Comments

Next Save as Draft

Figure 18: Generation Expenditure

**Transmission/Distribution Expenditure:-**

1. Click on 'Transmission/Distribution Expenditure'.
2. Application will open a form with Transmission/Distribution expenditure related information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Next' button.
6. Application will save the form and move to the next questionnaire form i.e. 'Overheads/ Other Expenditure'.

Wizard

Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire | Data Reliability | Governance | Gender | Calculated Factors | Indicators

Introductory Questions

Generation

Transmission

Distribution and Customer Outages

Demand Side Management

Human Resources / Safety

Customers / General

Finance

Generation Expenditure

Transmission/ Distribution Expenditure

Overheads/ Other Expenditure

Transmission/ Distribution Expenditure

79 Transmission/ Distribution O&M Cost 762650.55

80 Transmission/ Distribution Labour 1674932.68

Comments

Next Save as Draft

Figure 19: Transmission/Distribution Expenditure

Overheads/Other Expenditure:-

1. Click on 'Overheads/Other Expenditure'.
2. Application will open a form with overheads/other expenditure related information to be filled up.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Submit' button.
6. Application will save the form.

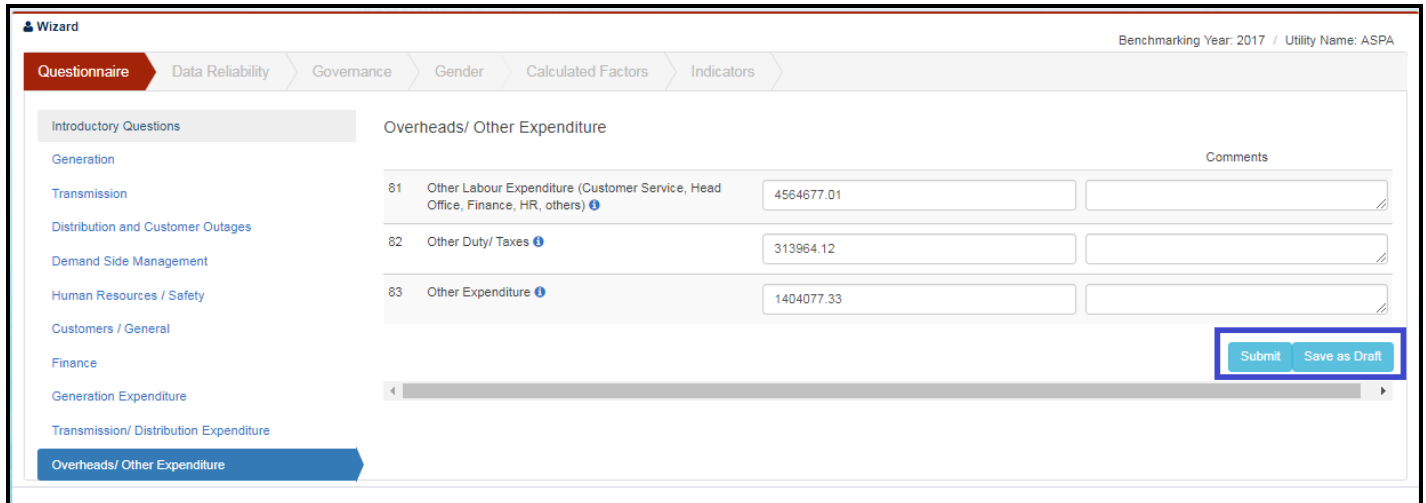


Figure 20: Overheads/Other Expenditure

VI. Data Reliability

1. Click on 'Data Reliability'.
2. Application will open a form with some question to be rated as A, B, C and D.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Submit' button.
6. Application will save the form.



Figure 21: Data Reliability

Wizard

Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire **Data Reliability** Governance Gender Calculated Factors Indicators

Data Reliability

Question	Description	Reliability Grade ⓘ	
i.	*How is fuel consumption calculated or derived?	A	Please fill in any supporting information on your self assessment in Table 3 i
ii.	*How are generation quantities calculated or derived?	A	Please fill in any supporting information on your self assessment in Table 3 ii
iii.	*How are customer outage impacts calculated or derived?	A	Please fill in any supporting information on your self assessment in Table 3 iii
iv.	*How are network demands and capacity utilisation calculated or derived?	A	Please fill in any supporting information on your self assessment in Table 3 iv
v.	*How are the number of connections or customers calculated?	A	Please fill in any supporting information on your self assessment in Table 3 v
vi.	*Where is financial information sourced from?	A	Please fill in any supporting information on your self assessment in Table 3 vi

Save as Draft Submit

Figure 22: Data Reliability Page

VII. Governance

1. Click on 'Governance'.
2. Application will open a form with some Yes/No questions.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Submit' button.
6. Application will save the form.

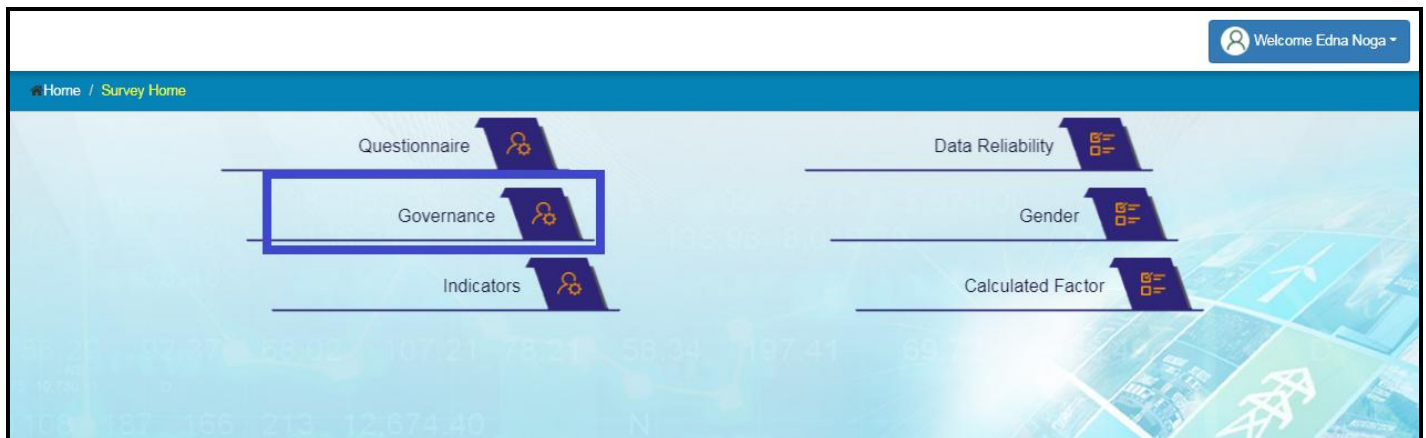


Figure 23: Governance

Wizard Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire **Data Reliability** **Governance** Gender Calculated Factors Indicators

Governance

	Response (Y/N)	Explanation
1. * Are government ministers appointed to the board?	No	Please explain why answer is either a 'Yes' or a 'No'
2. * If government ministers or other public servants are appointed to the board, do they represent their line and/or sector ministry?	Select	Please explain why answer is either a 'Yes' or a 'No'
3. * Does the Board have a conflict of interest policy and a code of conduct that is being fully implemented?	Yes	Please explain why answer is either a 'Yes' or a 'No'
4. * Is the utility operating within a clearly defined commercial mandate?	No	Please explain why answer is either a 'Yes' or a 'No'
5. * Is the CEO of the utility on a performance contract which has annual reviews?	Yes	Please explain why answer is either a 'Yes' or a 'No'
6. * Does the Board develop a forward looking business plan, with financial, operational and capital expenditure projections that covers a minimum time period of three (3) or more years?	Yes	Please explain why answer is either a 'Yes' or a 'No'
7. * Is an audited annual report completed within four months of the closure of each financial period?	No	Please explain why answer is either a 'Yes' or a 'No'
8. * Does the annual report disclose the companies performance against the strategic plan?	No	Please explain why answer is either a 'Yes' or a 'No'

Save as Draft **Submit**

Figure 24: Governance Page

VIII. Gender

1. Click on 'Gender'.
2. Application will open a form with gender related questions.
3. Fill the form.
4. Click on 'Save as Draft' button if some information will be filled later.
5. Click on 'Submit' button.
6. Application will save the form.

Welcome Edna Noga

Home / Survey Home

Questionnaire

Governance

Indicators

Data Reliability

Gender

Calculated Factor

Figure 25: Gender

Wizard Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire > Data Reliability > Governance > **Gender** > Calculated Factors > Indicators

Gender

Total number of staff in the organisation

* 1.a Total number of staff

* 1.b Total number of male staff

* 1.c Total number of female staff

Technical staff in the organisation (Generation, Transmission, Distribution Depts)

* 2.a Total number of technical staff

* 2.b Total number of male technical staff

* 2.c Total number of female technical staff

* 3 Is the CEO/General Manager/first officer in charge male or female? (M/F)

* 4 Is the second officer in charge of the organisation male or female? (M/F)

Senior Staff reporting directly to the CEO

5.a Total number of senior staff

5.b Total number of male senior staff

5.c Total number of female senior staff

Number of senior female staff in the organisation, according to role

Figure 26: Gender Page

IX. Calculated Factor

1. Click on 'Calculated Factor'.
2. Application will open a form auto calculated fields which are non editable.
3. View the form.

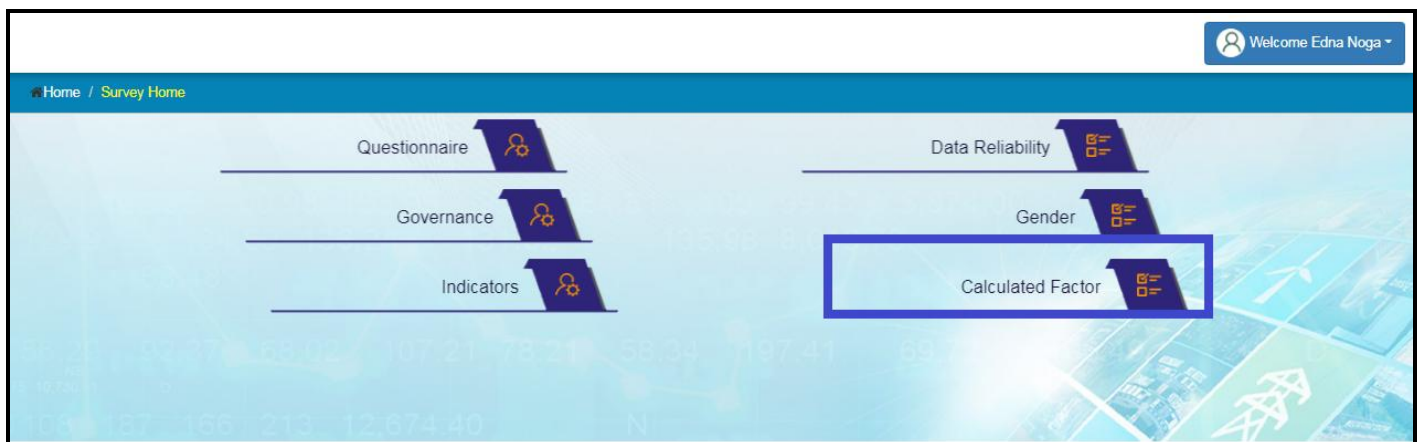


Figure 27: Calculated Factor

Wizard Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire > Data Reliability > Governance > Gender > **Calculated Factors** > Indicators

Calculated Factors

A	Gross Generation (MWh) ⓘ	164,943.00	167,271.00
	Total Utility Generation (MWh) ⓘ	164,943.00	167,271.00
	Total IPP Generation Purchased(MWh) ⓘ	0.00	0.00
B	Net Generation(MWh) ⓘ	156,902.00	159,193.00
C	Total Utility Generation Capacity(MWh) ⓘ	485,654.40	485,654.40
D	Total Guaranteed/Contracted IPP Generation Capacity(MWh) ⓘ	0.00	0.00
E	Total Installed System Generation Capacity(MW) ⓘ	55.44	55.44
F	Total Number of FTE Generation Employees(FTE employees) ⓘ	82.68	82.68
G	Total Fuel Oil Generation(MWh) ⓘ	160,761.00	161,993.00
H	Total Fuel Usage (L) ⓘ	42,394,549.00	42,869,601.00
	Total Fuel Usage (kg) ⓘ	35,611,422,000.00	36,010,466.00
I	Total Utility Capacity Hours Out Of Service (MWh) ⓘ	3,134.00	3,134.00
J	Total IPP Capacity Hours Out Of Service (MWh) ⓘ	5,664.00	0.00
K	Total Capacity Hours Out Of Service (MWh) ⓘ	8,798.00	3,134.00
L	Average Number of Distribution & Customer Service Employees (employees) ⓘ		47.50

Figure 28: Calculated Factor Page

X. Indicators

4. Click on 'Indicators'.
5. Application will open a form auto calculated fields which are non editable.
6. View the following fields listed below:
 - Generation
 - Transmission
 - Distribution
 - Demand Side Management
 - Human Resource/ Safety
 - Customers/ General
 - Financial Indicators



Figure 29: Indicators

Generation:-

Wizard Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire > Data Reliability > Governance > Gender > Calculated Factors > **Indicators**

Generation		Main Grid	All Grids
Transmission			
Distribution	1 Load Factor (%)	72.35	71.98
Demand Side Mangement	2 Capacity Factor (%)	33.96	34.44
Human Resources / Safety	3 Availability Factor (%)	98.19	99.35
Customers / General	4 Generation Labour Productivity (GWh/FTE generation employee)	1.99	2.02
Financial Indicators	5 Specific Fuel Oil Consumption (volume) (kWh/L)	3.79	3.78
	5 Specific Fuel Oil Consumption (weight) (kWh/kg)	0.00	4.50
	6 Lube Oil Consumption (kWh/L)	770.67	772.41
	7 Forced Outage (%)	214.17	0.00
	8 Planned Outage (%)	0.26	0.00
	9 Generation O&M Costs (US\$/MWh)		47.48
	10 Power Station Usage (%)	4.90	4.83
	11 Renewable Energy to Grid (%)	2.27	2.89
	12 IPP Energy Generation (%)	0.00	0.00
	13a Distillate Generation (%)	97.46	96.84

Figure 30: Generation Indicator

Transmission:-

Wizard

Questionnaire Data Reliability Governance Gender Calculated Factors **Indicators**

Benchmarking Year: 2017 / Utility Name: ASPA

Generation

Transmission

Distribution

Demand Side Mangement

Human Resources / Safety

Customers / General

Financial Indicators

Transmission

Main Grid only

15	Transmission Losses (%)	100.00
16	Transmission Reliability (outage events/100 km)	NaN
17	Transmission SAIDI (planned) (mins)	NaN
17	Transmission SAIDI (unplanned)	NaN

Figure 31: Transmission Indicator

Distribution:-

Wizard

Questionnaire Data Reliability Governance Gender Calculated Factors **Indicators**

Benchmarking Year: 2017 / Utility Name: ASPA

Generation

Transmission

Distribution

Demand Side Mangement

Human Resources / Safety

Customers / General

Financial Indicators

Distribution

Main Grid All Grids

18	Network Delivery Losses (%)	7.44	7.40
19	Distribution Losses (%)	7.44	
20	Customers per Distribution Employees (customers/distribution employee)		258.91
21	Distribution Reliability (events/100km)	17.64	
22	Distribution Transformer Utilisation (%)	21.91	
23	Distribution O&M Cost (US\$/km)	21,237.50	
24	Distribution SAIDI (Total) (mins per customer)	63.85	
24.1	Distribution Related SAIDI (Unplanned) (mins per customer)	63.70	
24.2	Distribution Related SAIDI (Planned) (mins per customer)	0.15	

Figure 32: Distribution Indicators

Demand Side Management:-

Wizard

Questionnaire Data Reliability Governance Gender Calculated Factors **Indicators**

Benchmarking Year: 2017 / Utility Name: ASPA

Generation

Transmission

Distribution

Demand Side Mangement

Human Resources / Safety

Customers / General

Financial Indicators

Demand Side Mangement

Main Grid Only

26	DSM Initiatives	Yes
27	DSM Budget (USD)	0.00
28	DSM FTE Employees (FTE employees)	0.00
29	DSM MWh Savings (MWh)	0.00
30	Power Quality Standards	None

Figure 33: Demand Side Management

Human Resources/ Safety:-

Wizard Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire > Data Reliability > Governance > Gender > Calculated Factors > **Indicators**

Generation
Transmission
Distribution
Demand Side Mangement
Human Resources / Safety
Customers / General
Financial Indicators

Human Resources / Safety

Main Grid Only

31	Lost Time Injury Duration (days)	0.23
32	Lost Time Injury Frequency Rate (injuries per million hrs worked)	14.56
33	Labour Productivity (customers/FTE employee)	86.25

Figure 34: Human Resource/Safety

Customers/General:-

Wizard Benchmarking Year: 2017 / Utility Name: ASPA

Questionnaire > Data Reliability > Governance > Gender > Calculated Factors > **Indicators**

Generation
Transmission
Distribution
Demand Side Mangement
Human Resources / Safety
Customers / General
Financial Indicators

Customers / General

Main Grid All Grids

34	Service Coverage (%)	97.61
35	Productive Electricity Usage (%)	68.00 66.99
36a	Lifeline Tariff Usage (%)	0.00
36b	Domestic Usage (%)	33.01
36c	Commercial Usage (%)	27.89
36d	Industrial Usage (%)	17.71
36e	Other Usage (%)	21.39
37	Customer Unbilled Electricity (%)	0.00
38	Self Regulated or Externally Regulated	Self Regulated

Figure 35: Customers/General

Financial Indicators:-

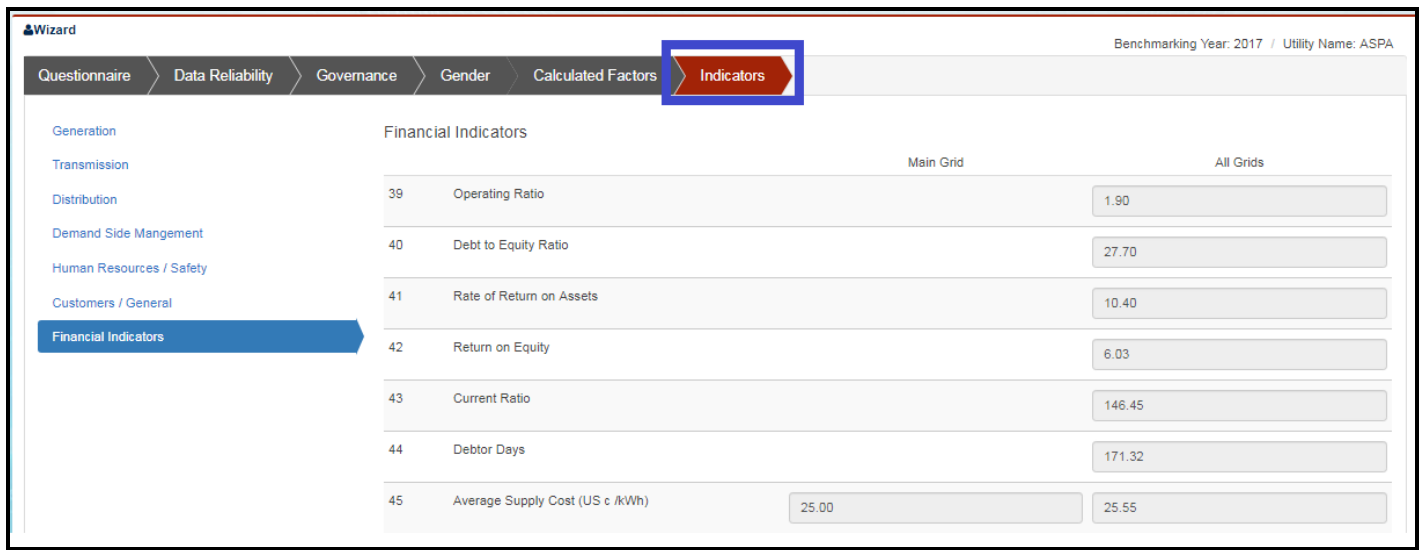


Figure 36: Financial Indicators

REVISION HISTORY

REVISION	DATE	AUTHOR	DESCRIPTION
1.1	24-JUN-2019	RMSI	PREPARED

APPROVALS

[Approvals Section authenticates the document and is signed by authorized signatories.]

This document has been read and approved by the following departments responsible for its implementation. Those signing below indicate, by their signature, that the contents of this document are correct and complete and have been prepared in accordance with the currently approved processes.

S. NO.	NAME	TITLE/ROLE	SIGNATURE