

Customer Service Department,

2024 ELECTRICITY & WATER BULK DEMAND SURVEY**FOR CUSTOMERS OF MORE THAN 5MW OF POWER AND 25m³/HOUR (0.132 MIGD) OF WATER**

Date Received by Respondent: ____/____/____ Survey No (SN): 2024 / ____ / ____ / ____
 Year / Sl. No. / Sector (Pvt./Govt./Gen)/Customer
 Date Returned to CSD : ____/____/____ Application No (If available):

Section A - General

- A1. Responded by: ☐ Project Owner ☐ Project Developer
- A2. Project Title: _____
☐ Entirely new (first-time) survey for a new project ☐ Update to an earlier survey (if existing project) SN: _____
- A3. Project Location: City _____ Municipality _____ Geographical Zone No. _____ GIS PIN No. _____
 Electricity Meter No (if available). _____ Water No _____
 QID No./Establishment No./ Commercial Registration No.: _____
- A4. Project Brief Scope and the Type of End-Product (E & W): _____
 (Survey shall include all components of E&W such as construction of Camps, Labour Camps (Temporary & Permanent))
- A5. Project Ownership: ☐ Government ☐ Gov+ Private Joint Venture ☐ Private Single Ownership
☐ Private Joint Ownership
- A6. Project Early Start: Quarter: _____ Year: _____ Project Early Finish: Quarter: _____ Year: _____
- A7. Current Project Execution Status: ☐ Planning ☐ Feasibility ☐ Design
☐ Tendering ☐ Construction ☐ Operation
- A8. Current Project Financial Status: ☐ Not Budgeted ☐ Budget Approved ☐ Finance Secured
- A9. Project Developer's/Owner's Name: _____
- A10. Product End user (E&W): _____
 (Customer is the final End User of KM Services)
- A11. Contractor's Name: _____
- A12. Project Consultant's name: _____

Section B – Project Demand Information

- B1. Type of Supply: ☐ Existing ☐ Additional ☐ New ☐ Temporary ☐ Others: _____
- Important: If the Type of Supply is Temporary, Temporary Connection Forms and Metering Forms must be filled in when applying for supply. The form is available at Customer Services Department (Contact Head of Planning & Bulk Customers as Indicated below).*
- B2. Development Class (Detailed in page 6, item E7 to E11 under Specific Guide Lines):
☐ Governmental ☐ Commercial ☐ Industrial ☐ Residential ☐ Others _____
 For Industrial: ☐ Heavy ☐ Medium ☐ Light (Classification as per Government License)
- B3. Expected End-Use (%):

Electricity Expected % of Ultimate Demand:

☐ Lighting
 ☐ Air conditioning
 ☐ Motors
 ☐ Arc Furnaces
☐ Reactive Electricity Compensators
 ☐ Harmonic Generators
☐ Labour Camp
 ☐ Others

Water % of Ultimate Demand:

☐ Agriculture
 ☐ Landscaping
 ☐ Sanitation/Waste Disposal
☐ Process Water
 ☐ Cooling
 ☐ Fire Protection
 ☐ Drinking
☐ Cooking
 ☐ Washing/Cleaning
 ☐ Labour Camp
 ☐ Others

B4. Project Specific Consumption Rates

B4.1 Average electrical energy consumption per unit of production: _____ (MWh/Unit)

B4.2 Average water consumption per unit of production: _____ (Cubic Meter/Unit)

B5. Yearly Maximum Demand & Quantity (See Table "B5")

Note: Before filling in Table B5, please see the Section E - Notes & Guidelines E7 to E11 on page 6.

Table B5 - Yearly Maximum Peak Demand & Quantity								
Year	Facility Population in the Year (Refer E14 in Page 7)	Project Execution Phase(Ref. A7)	Electricity Demand in the Year		Potable Water Demand in the Year		Distillate Demand in the Year	
			Maximum Peak *MW (See E18)	MWh/ Year	Maximum Peak **MIGD (See E18)	MIG/ Year	Maximum Peak **MIGD	MIG/ Year
Past Years Historical Actual Demand								
2019								
2020								
2021								
2022								
2023								
Future Demand Forecast								
2024								
2025								
2026								
2027								
2028								
2029								
2030								
2031								
2032								
2033								
2034								

*MW= Megawatt

**MIGD= Million Imperial Gallons per day

B 6 : Bulk Customer Having multiple project / Connections

Project Name/s ⁽¹⁾		2024	2025	2026	2027	2028	2029
	Electricity (MW) ⁽²⁾						
	Water (MIGD) ⁽³⁾						
	Project Status (O,C,T,D,F,P) ⁽⁴⁾						
	Electricity (MW) ⁽²⁾						
	Water (MIGD) ⁽³⁾						
	Project Status (O,C,T,D,F,P) ⁽⁴⁾						
	Electricity (MW) ⁽²⁾						
	Water (MIGD) ⁽³⁾						
	Project Status (O,C,T,D,F,P) ⁽⁴⁾						

1. These are the Project Names on KM Records. Please add/amend as required, denoting as existing and new project loads.

2. Electricity - Peak demand (in MW)

3. Water - Peak demand (in MIGD) total for potable & distillate

4. Project Status : O – Operation , C – Construction , T – Tender , D – Design , F – Feasibility, P - Planning

Section C – In-House Electricity and Water Production Information

C1. Do you intend to supply your Electricity/Water demand through in-house production? (Y/N) _____

If Yes, please indicate the percentage of your requirements you intend to provide through your in-house production.

C1.1 Electricity (%) _____ C1.2 Water (%) _____

C2. Do you need backup supply from Kahramaa? (Y/N) _____

If Yes, please tick mark if one or both apply:

Require Backup during Kahramaa's System Peak Periods.

Electricity ☐ Water ☐

Require Backup during Kahramaa's System Off-Peak Periods.

Electricity ☐ Water ☐

C3. Please provide your in-house capability to produce electricity and/or water, if any:

ELECTRICITY			
Unit No.	Generating Unit Description	Capacity (MW)	Type of generation technology (ST-GT-CC etc.....).

WATER			
Unit No.	Water Production Unit Description	Capacity (MIGD)	Type of Technology (MSF, MED, RO)

C4. If you have Renewable Energy (RE) systems installed or you plan to install RE systems, what percentage of your consumption is / would be covered by self-installed RE systems?

C5. Do you intend to have Electricity/water exchange with Kahramaa? (Y/N) ____

If Yes, please provide the following details:

ELECTRICITY EXPORT & IMPORT			
Year	Type of Exchange E – Export I – Import	Quantity (MWh/Year)	Indicative Tariff (QR/kWh)

WATER EXPORT & IMPORT			
Year	Type of Exchange E – Export I – Import	Quantity (Cubic Meter / Year)	Indicative Tariff (QR/Cubic Meter)

Please suggest any provisional key commercial terms for Export and Import in the following space provided. If the space is insufficient please attach a separate sheet. The terms you suggest are for survey purposes only and do not constitute any commitments by either party. Please contact the Head of Business Development, Corporate Planning & Business Development department if you need to discuss further, at Telephone 44845425/44845426.

Section D – Attachments

Please tick-mark if the following attachments are attached to the survey form or not.

- | | | |
|--|------------------------------|------------------------------|
| D1. Project Location Map (Hardcopy & Electronic digital Auto Cad files
Copies) including proposed substation location with Coordinates for Electricity. | ☐ Yes | ☐ No. |
| D2. Project Master Schedule | ☐ Yes | ☐ No |
| D3. Yearly Load Demand Curves | ☐ Yes | ☐ No |
| D4. Proposed Electricity & Water Exchange Terms | ☐ Yes | ☐ No |

Section E – Notes & Guidelines

General Notes:

- E1. By signing this survey form the respondent warrants that all information provided are accurate and reliable to the best of Project Owner's knowledge and Project Owner is properly authorized to provide such information to Kahramaa.
Contact, Bulk Customer Section, contact no:44628566/44628321 44628220 Email: survey@km.qa
- E2. The respondent must be aware and acknowledge that all the information provided are for Kahramaa's planning purposes only and does not imply commitment by the Project Owner or Kahramaa. If the Project Owner requires a commitment to supply then he must fill in and submit the Application Form which is available at **Production Planning, Water Resources & Business Development Department**,
- E3. Normally Kahramaa is expected to be able to meet any bulk demand three (3) years prior the year at which the supply is required. Kahramaa requires a minimum lead time of three years to prepare for any future additional capacity required.
- E4. As per Qatar Ministry of Energy regulations, customers are not allowed to generate and meet their own electricity and water demand without prior permission from Kahramaa.
- E5. At its own discretion, Kahramaa may conduct an independent investigation to verify the accuracy of any and all information provided in this survey form by the respondent.
- E6. The information provided by the respondent about sites & corridors are considered as provisional only. In case of conflict between customer's project sites &/ routes and KAHRAMAA existing and/or future sites and/or routes, the customer shall be responsible for the cost of any relocation of KAHRAMAA existing installations and obtaining the alternative sites and/or routes for future and/or relocated installations which are in conflict with his project sites and/or routes.

Specific Guidelines for filling Item B2 in Page 1:

CLARIFICATIONS AND DEFINITIONS OF DEVELOPMENT CLASS IN 2024 SURVEY FORM

- E7. GOVERNMENTAL:** Projects sponsored, financed, owned and contracted by Government Agencies like Qatar Government directly or Agencies like UPDA, MMAA, Qatar Foundation, National Health Authority, Kahramaa, Hamad Medical Corporation, and such others.
- E8. COMMERCIAL:** All Projects used for Business Purposes other than Industrial and Residential, which are Private like City Centre, Land Mark, Dasman Centre, Lulu Centre, Villagio, Hotels and such other Entities.
- E9. RESIDENTIAL:** All Individual Flats, Apartments, Grouped Buildings and Residential Complexes, Villas and Independent Houses used for purely for Residential Purposes of Families or Individuals.
- E10. MIXED COMPLEXES (RESIDENTIAL & COMMERCIAL):** All projects which may be a combination of both Residential & Commercial in nature such as The Pearl Qatar, Barwa, Lusail Development, North Beach Resort Projects, and such other Entities.
- E11. INDUSTRIAL:** All Projects, Which are basically Process /Production / Manufacturing in nature such as Qatar Steel, Qatar National Cement Company (QNCC), Qatar Fertilizers, All QP Process Projects and such other entities of this nature, other than Residential, Commercial & Mixed Residential Commercial nature. This Industrial class may be categorized into 3 categories: eg., Heavy, Medium and Light Industrial.

Specific Guidelines for filling Table B5:

- E12. Last 6 Years Historical Actual Demand.** For the 6 Years before the Survey year, please provide Actual Demand Figures for Projects that are in Operation phase.
- E13. Future Demand.** For the succeeding future years, please provide supply requirements in all the various phases of the Project. The information is to be provided by the respondent for a period not less than 14 years from the start of the planning phase.
- E14. Facility Population.** Provide the number of people requiring electricity and water for all phases of the project for each year.
- E15. Project Execution Phase.** Write the appropriate letter for each phase or a combination of the same (for parallel phase) as appropriate against each year with P=Planning, F=Feasibility, D=Design, T=Tendering, C=Construction, O=Operation.
- E16. Electricity Demand, Potable Water Demand and Distillate Demand.** First, fill in the historical demand for the last 6 years, if any. Then fill in the future demands in the succeeding future years. Attaching yearly demand curves will also help Kahramaa understand your requirements better.
- E17. Peak Demand for Water:** Means the highest Monthly Average Demand in Million Imperial Gallons per Day (MIGD) during the Year.
- E18. Peak Demand for Electricity:** Means the highest Electricity Demand in Megawatts (MW) during the Year.

Specific Guidelines for filling Table B6.1 to B6.5:

- E19. Facility Population.** Provide the number of people requiring electricity and water for all phases of the project for each month.
- E20. Project Execution Phase.** Write the appropriate letter for each phase or a combination of the same (for parallel phase) as appropriate against each month with P=Planning, F=Feasibility, D=Design, T=Tendering, C=Construction, O=Operation.
- E21. Electricity MW, Electricity MWh/Month, Potable Water MIGD, Potable Water MIG/Month, Distillate MIGD, Distillate MIG/Month.** Fill in the future demand information on each month of the year.

Section F – Respondent Contact Information

Name : _____ **Designation:** _____

Address : _____

Telephone : _____ **Mobile:** _____ **Fax:** _____ **Email:** _____

Signature : _____ **Date (dd/mm/yy):** ____/____/____

Note: If Joint Venture Project then Joint Venture Leader shall sign.

If any respondent data is provided by the Consultant, please provide the consultant's contact details as required below:

Name : _____ **Designation:** _____

Address : _____

Telephone : _____ **Mobile:** _____ **Fax:** _____ **Email:** _____

Signature : _____ **Date (dd/mm/yy):** ____/____/____

Date Survey Form Received by CPBD from CSD (dd/mm/yy): ____/____/____

Internal Circulation Process:

1. After receiving from CSD, filled up Survey Forms shall be circulated by CPBD to all concerned departments. Department shall communicate their comments through a formal IDM to CPBD. If the space provided is insufficient for comments, they can separately attach more sheets.
2. If no comments from other departments are received by CPBD within 2 weeks after circulation, it shall be assumed that they have no further comments.
3. Should CPBD deem it necessary to verify any doubts on survey data in this form, CPBD shall require other departments to investigate further.

Dept	Comments	Name	Signature	Date (dd/mm/yy)	Date Comments Received by CPBD (dd/mm/yy)
ET					
EP					
ED					
WP					
WO					
WF					
TE					
TW					
CS					

Note: Pages 1 to 7 of this form should be filled in by the developer or owner of projects requiring a minimum demand of 5MW of electricity and/or 600 cubic meters/day (0.132 MIG) of water.

CSD Mailing / Contact Details: Bulk Customers Section, Production Planning, Water Resources & Business Development Department, KAHRAMAA, PO Box 41, DOHA, Qatar Office: 44628566/44628321/44628220 /Fax: 44628290,

Email:- survey@km.qa

Bulk Demand Survey Addendum Renewable Energy (RE) Systems

Question

Answer, if applicable

I. In-house RE production information

1. What are your main motivations, if any, for installing RE system?	
2. If you have RE systems installed or you plan to install RE systems, what percentage of your consumption is / would be covered by self-installed RE systems?	
3. Are there specific loads that would be fed from the installed RE system?	
4. What is the expected daily export of electricity to the grid during the summer and winter? Please provide an hourly data table with export to / import from grid, if possible	
5. What is the total area available that you can utilize for on-site RE installation (e.g. rooftop, ground space)? Please share breakdown by area type if possible	
6. What is your plan to install RE systems by year, capacity, mounting location (e.g., rooftop, ground, wall), RE system type (e.g., thin film PV), and frame type (e.g., fixed, single axis tracking)? – Please attach details separately if available	
7. Would you consider installing energy storage systems? If yes, for what reason (e.g., self-sufficiency, increased reliability, to reduce electricity bill)?	

II. Required enablers for on-site RE installation

8. What incentives would you require to install RE systems?	
9. Would you consider installing RE systems if you are not able to sell excess electricity to the grid?	
10. Does the current tariff structure incentivize you to install RE systems? If not, at what tariff level would you consider RE to become more feasible than grid supply?	
11. Are there any supporting regulations, standards or guidelines currently missing that are derailing you from installing RE systems?	

III. Consumption and captive generation

12. If you have visibility on your total demand needs beyond 2030, please provide this information	
13. Do you plan to shift part of your captive generation consumption to the grid? If yes, please provide details on the percentage, the timeline and the drivers for the switch	
14. Do you plan to connect any currently isolated electrical systems to the grid? If so, what is the reason and what is the impact on the grid (e.g., additional power supply, change in supply and consumption pattern)	

IV. Heating

15. What is your current and future heating demand (in Joules)?	
16. What is the current rate you are paying for heating?	
17. Would you consider replacing natural gas with electricity to serve this demand? If so, when and under which conditions?	
18. Would you consider using solar thermal technologies to satisfy part of or all the heating demand?	