

**APPENDIX 4E
UTILITY MANAGEMENT SERVICES**

TABLE OF CONTENTS

PART 1.	SERVICES	1
1.1	General Requirements	1
PART 2.	UTILITY MANAGEMENT SERVICES	1
2.1	Management and Administration	1
2.2	Conservation Program	3
PART 3.	PERFORMANCE INDICATORS CHART	4

**APPENDIX 4E
UTILITY MANAGEMENT SERVICES**

PART 1. SERVICES

1.1 **General Requirements** – In addition to the standards and specifications set out in Schedule 4 [Services Protocols and Specifications] and the requirements set out in Schedule 2D [Energy], Project Co will:

- 1.1.1 deliver the Utility Management Services for all Utilities serving the Facility:
 - 1.1.1.1 24 hours per day, 365 or 366 days per year, as applicable; and
 - 1.1.1.2 in a manner integrated and coordinated with the Plant Services, so as to facilitate the smooth operation of the Facility;
- 1.1.2 continuously manage all Utilities necessary to meet the operational requirements of the Facility, in consultation with the Authority, in accordance with Good Industry Practice, in an efficient and economical manner, and with due regard to then current principles of sustainability;
- 1.1.3 monitor Utility consumption load factors (LF) and any Demand Charges via the BMS and work in concert with the Authority to reduce Demand Charges by enacting, subject to Authority approval, reasonable adjustments to Facility and equipment operating schedules; and
- 1.1.4 maintain the Facility as a 24 hour essential building and maintain electrical and natural gas power to the Facility as an essential service. Project Co will maintain the emergency power systems in such a way that power is available to the Facility 24 hours a day, 365 or 366 days a year, as applicable.

PART 2. UTILITY MANAGEMENT SERVICES

2.1 **Management and Administration** – As part of the delivery of the Utility Management Services, Project Co will: *[SP01, Performance Indicators Chart]*

- 2.1.1 manage all Utilities, including:
 - 2.1.1.1 Energy and emergency power;
 - 2.1.1.2 Steam, heating water and chilled water;
 - 2.1.1.3 water (including water conservation);
 - 2.1.1.4 sanitary waste;
 - 2.1.1.5 storm water;

- 2.1.1.6 natural gas;
- 2.1.1.7 medical gas compounds; and
- 2.1.1.8 telephone and data cabling;
- 2.1.2 manage, test and troubleshoot all Utilities, associated systems and infrastructure;
- 2.1.3 ensure the integrity of the systems that support and deliver Utilities within the Facility, and ensure that an adequate, continuous, supply of all Utilities is maintained and available to all locations in the Facility 24 hours a day, 365 or 366 days a year, as applicable;
- 2.1.4 be responsible for:
 - 2.1.4.1 obtaining, and maintaining current, all required permits, licenses, test certificates, third party certifications and approvals related to, or required for, the Utility requirements of the Facility; and
 - 2.1.4.2 undertaking all testing, cleaning and Maintenance, of the systems that support and deliver Utilities within the Facility, including as required by the Utility Company(s) and applicable Governmental Authorities, and maintaining appropriate records, available for inspection by the Authority, with respect to the foregoing activities;
- 2.1.5 administer and post hazard and safety notices and record, distribute and evaluate such notices to ensure that all notification procedures required by the Utility Company(s) and applicable Governmental Authorities are complied with;
- 2.1.6 provide, manage and operate an effective BMS that includes an integrated energy and utilities management system;
- 2.1.7 ensure all physical connections and structured cabling for telephone and data services are provided and Maintained at all times;
- 2.1.8 regularly review and provide recommend amendments to the Authority, as required, regarding the Utility supply specifications, such that they are consistent with the requirements of the Authority;
- 2.1.9 prepare a Utilities report for the Facility as part of the Annual Service Plan (together with progress reports at each Payment Period) that provides user configurable information, detailing time stamped usage history, status, event history, consumption history and other required Utility usage and control information, in detailed and summary formats;
- 2.1.10 provide technical support, advice and assistance, upon request, in connection with the Authority's negotiation of Utility contracts, tariffs and bulk purchase agreements;

- 2.1.11 in the event that there is a disruption from a Utility Company, supply emergency Utilities in accordance with the Design requirements set out in Schedule 3 [Design and Construction Specifications] and cooperate and assist the Authority in any contingency response;
- 2.1.12 respond to all Demand Requisitions in connection with Utilities;
- 2.1.13 provide notice to the Authority of all scheduled interruptions to any Utility supply, whether or not such interruptions will affect any Authority Activities or Project Co operations, promptly upon becoming aware of the scheduled disruption;

2.2 Conservation Program [SP02, Performance Indicators Chart]

- 2.2.1 Project Co and the Authority will establish a joint utilities subcommittee, under the Operating Period Joint Committee, in accordance with Section 3.2.3.2 [Operating Period Committee] of Schedule 4 [Services Protocols and Specifications].
- 2.2.2 In connection with the joint utilities subcommittee, and as part of the Utility Management Services, Project Co will:
 - 2.2.2.1 advise the Authority with respect to the Facility's Utility consumption, including cost implications, throughout the Operating Period, and identify:
 - 2.2.2.1(1) the potential for reducing Demand Charges through reasonable adjustments to Facility and equipment operating schedules; and
 - 2.2.2.1(2) the potential for reductions in Utility consumption through reasonable plant upgrading/modernization schemes, new equipment developments and renovations,

provided that any Project Co recommendations will be subject to the provisions of Section 3 [Innovation Proposals] of Schedule 6 [Changes, Minor Works and Innovation Proposals];
 - 2.2.2.2 work with the Authority to establish a Utilities conservation program which is consistent with the "REVIEWED" Energy Management Plan and sets consumption reduction targets; and
 - 2.2.2.3 ensure that Project Co Persons engaged in the delivery of the Services and designated Authority Persons are made aware of the aims of the Utilities conservation program and the Energy Management Plan and given guidance on their implementation.

PART 3. PERFORMANCE INDICATORS CHART

Section	Reference	Parameter	Service Failure Category	Response Time	Rectification Period	Recording Frequency
Section 2.1	SP01	Management and Administration				
	SP01a	In the event that there is a disruption from a Utility Company, Project Co shall supply emergency Utilities in accordance with the requirements of Section 2.1.11 of Appendix 4E [Utilities Management Services].	High	See Table1, Appendix 4C [Plant Services]	See Table1, Appendix 4C [Plant Services]	PE
	SP01b	Maintaining appropriate records in relation to all permits, licenses, test certificates and approvals. All Utility licenses are current, correct for the current supply requirements and available for inspection by the Authority.	High	30 min	4 hrs	PE
Section 2.2	SP02	Conservation Program				
	SP02a	Energy monitoring and reporting conducted as agreed between the Parties through the joint utilities subcommittee, under the Operating Period Joint Committee.	Medium	2 hrs	24 hrs	M

Legend:

Recording Frequency:

PE=Per Event

M=Monthly

A=Annually

N/A=Not Applicable