

Gemini API Specification

System Status History

Copyright ~~NGT~~, all rights reserved.

No part of this publication may be reproduced in any material form (including photocopying and restoring in any medium or electronic means and whether or not transiently or incidentally) without the written permission of NGT except in accordance with the provisions of the Copyright, Designs and Patents Act 1998.

For further information on the use of this document please refer to the Information Services Management System (ISMS) or contact the Quality Systems Group.

Author (for this version):	xoserve ISNGT IS
Owner:	xoserve ISNGT O&T
Document Reference:	4042
Version:	32
Status:	For Representation Approved
Date:	06 February 2006 17 March 2005

Table of Contents

1	API Specification	3
1.1	Overview	3
1.2	API URLs.....	3
1.3	XML Specifications	3
1.3.1	API Request	3
1.3.2	API Response	4
1.4	API Specific Error Messages	5
2	Document Control	6
2.1	Superseded Documents	6
2.2	Version History.....	6

1 API Specification

1.1 Overview

This API retrieves the System Status History for a calendar day.

This specification contains interface details (relevant URLs, request and response XML message formats, specific error messages) for this API. For more general guidance on API function and usage, see the API Usage Guidelines document.

1.2 API URLs

All URLs are expressed relative to the root URL for the API service. BAs are advised to parameterise URLs to minimise the impact of change.

URL to Access the API

API clients must invoke this URL to access this API’s functionality:

`/gemini/controllers/SystemStatusHistoryControllerAPI/`

URL for Request XSD

The XSD found at this URL can be used to validate the request XML format:

`/gemini/api/schema/geminiapisystemstatushistoryreq.xsd`

URL for Response XSD

The XSD found at this URL can be used to validate the response XML format:

`/gemini/api/schema/geminiapisystemstatushistoryres.xsd`

1.3 XML Specifications

An asterisk in the ‘Hierarchy’ column of API Request and Response element tables denotes an element or group that may occur multiple times.

1.3.1 API Request

Element Table

Hierarchy	Data Element	Description	Data Type	Data Length	Mandatory

0	NM_SYS_HSTRY_QRY	Top level hierarchy for query elements			
1	CLNDR_DAY	The calendar day for which the system status history details are being queried.	Date	10	Yes

Schema Definition

Name of file: geminiapisystemstatshistoryreq.xsd

```
<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="NM_SYS_HSTRY_QRY">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="CLNDR_DAY" type="xs:date"/>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>
```

1.3.2 API Response

Element Table

Hierarchy	Data Element	Description	Data Type	Data length
0	NM_SYS_HSTRY_OUT	Top level hierarchy for output elements		
1	METADATA	Top level hierarchy for meta information elements		
2	TMSTMP	Time stamp of API access	DateTime	19
1	NM_SYS_HSTRY_QRY	Top level hierarchy for query elements		
2	CLNDR_DAY	The calendar day for which the system status history details are being queried.	Date	10
1	DTL	Top level hierarchy for header fields.		
2*	SYS_STATS_HSTRY_DTL	Top level hierarchy for the individual record elements		
3	UPDT_TM	The time at which the Line pack details were received from the source system This will be of the format hh:mm	String	5
3	CURR_DMND	The current forecast for the EOD demand (Mcm)	Float	4,1
3	OPN_LNPK	The linepack at the start of the CalendarGas Day (Mcm)	Float	4,1
3	PCLP1	The Projected Closing Line pack based on DFN information received from Delivery Facility Operators (DFOs') (Mcm)	Float	4,1
3	PCLP2	The Projected Closing Line pack based on aggregate BA INS nominations (Mcm)	Float	4,1
3	SAP	The system average price (p/kWh)	Float	6,4
3	SMP_BUY	The system marginal price- buy (p/kWh)	Float	6,4
3	SMP_SELL	The system marginal price- sell (p/kWh)	Float	6,4

3	LNPk_CMNT	Additional details related to the system status information	String	400
---	-----------	---	--------	-----

Schema Definition

Name of file: geminiapisystemstatushistoryres.xsd

```

<?xml version="1.0"?>
<xs:schema xmlns:xs="http://www.w3.org/2001/XMLSchema">
  <xs:element name="NM_SYS_HSTRY_OUT">
    <xs:complexType>
      <xs:sequence>
        <xs:element name="METADATA">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="TMSTMP" type="xs:dateTime"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="NM_SYS_HSTRY_QRY">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="CLNDR_DAY" type="xs:date"/>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
        <xs:element name="DTL">
          <xs:complexType>
            <xs:sequence>
              <xs:element name="SYS_STATS_HSTRY_DTL" minOccurs="0"
maxOccurs="unbounded">
                <xs:complexType>
                  <xs:sequence>
                    <xs:element name="UPDT_TM" type="xs:string"/>
                    <xs:element name="CURR_DMND" type="xs:float"/>
                    <xs:element name="OPN_LNPk" type="xs:float"/>
                    <xs:element name="PCLP1" type="xs:float"/>
                    <xs:element name="PCLP2" type="xs:float"/>
                    <xs:element name="SAP" type="xs:float" minOccurs="0"/>
                    <xs:element name="SMP_BUY" type="xs:float"
minOccurs="0"/>
                    <xs:element name="SMP_SELL" type="xs:float"
minOccurs="0"/>
                    <xs:element name="LNPk_CMNT">
                      <xs:simpleType>
                        <xs:restriction base="xs:string">
                          <xs:maxLength value="400"/>
                        </xs:restriction>
                      </xs:simpleType>
                    </xs:element>
                  </xs:sequence>
                </xs:complexType>
              </xs:element>
            </xs:sequence>
          </xs:complexType>
        </xs:element>
      </xs:sequence>
    </xs:complexType>
  </xs:element>
</xs:schema>

```

1.4 API Specific Error Messages

None

2 Document Control

2.1 *Superseded Documents*

Title	Reference	Version	Date
Gemini – API Specification for Energy Balancing and Exit Capacity Release	4021	1	21-Oct-2004

2.2 *Version History*

Version	Status	Date	Author(s)	Summary of Changes
Prior version history removed for brevity				
1	Approved	20-Jan-2005	NGT IS	Baseline approved at January 2005 UK-Link Committee.
2	For Representation	03-Feb-2005	NGT IS	Cardinality (*) indicator added to element tables.
2	Approved	17-Mar-2005	NGT IS	Approved at UK-Link Committee.
<u>3</u>	<u>For Representation</u>	<u>06-Feb-2006</u>	<u>xoserve IS</u>	<u>Reference to “Gas Day” corrected to “Calendar Day” in OPN LNPk element description.</u>