

Malta's Annual report to the European
Commission regarding the implementation of
Directive 2003/54/EC and 2003/55/EC

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1 Foreword

This report covers the issues arising from the reporting requirements on the implementation of the Directive 2003/54/EC concerning common rules for the internal market in electricity and directive 2003/55/EC concerning common rules for the internal market in gas covering the period July 2004 to July 2005. In absence of a gas market in Malta, the report focuses mainly on the electricity sector.

Malta's electricity system qualifies as a small isolated system since consumption is less than 3,000 GWh in 1996 and since the system is not connected to other systems. A request has been made for derogations from compliance with Art. 21(1) and Art. 20(1) of Directive 2003/54/EC. In addition, Malta requested a derogation from Chapter IV of the directive since Malta does not possess a transmission system as defined in the Directive. Currently, electricity in Malta is produced, distributed and supplied solely by one company, Enemalta Corporation.

The Malta Resources Authority (MRA), established in Malta in February 2001 by the Malta Resources Authority Act (Cap.423) is the regulatory board for energy, water and mineral resources. Its main functions are to regulate, monitor and keep under review all practices, operations and activities relating to energy, water and mineral resources. The MRA is accountable to the Minister responsible for resources.

Chairman/CEO

Malta Resources Authority

2 Summary\Major Developments in the last year

2.1 Composition and Main Functions of the regulatory board

The Malta Resources Authority (MRA), established in Malta in February 2001 by the Malta Resources Authority Act (Cap.423) is the regulatory board for energy, water and mineral resources. The board consists of a chairman and not less than four and not more than six other members, who may be appointed by the Minister responsible for resources for a term of between one to three years, and who can be re-appointed for further periods.

The main functions are listed in article 4(1) of the Malta Resources Authority Act (Cap. 423). The following is an extract from the said article:

“The Authority shall have the following functions:-

(a) to regulate, monitor and keep under review all practices, operations and activities relating to energy, water and mineral resources;

(b) to grant any license, permit or other authorisation, for the carrying out of any operation or activity relating to energy, water and mineral resources;

(c) to regulate and secure interconnectivity for the production, transmission and distribution of the services or products regulated by or under this Act;

(d) to ensure fair competition in all such practices, operations and activities;

(e) to establish minimum quality and security standards for any of the said practices, operations and activities and to regulate such measures as may be necessary to ensure public and private safety;

(f) to secure and regulate the development and maintenance of efficient systems in order to satisfy, as economically as possible, all reasonable demands for the provision of the resources regulated by or under this Act;

(g) to carry out studies, research or investigation on any matter relating to the resources regulated by or under this Act;

(h) to provide information and issue guidelines to the public and to commercial and other entities on matters relating to the said resources;

(i) to regulate the price structure for any activity regulated by this Act and where appropriate to establish the mechanisms whereby the price to be charged for the acquisition, production, manufacture, sale, storage and distribution thereof is determined;

(j) to establish the minimum qualifications to be possessed by any person who is engaged or employed in any activity regulated by or under this Act;

(k) to establish measures for the protection of the environment in the practices, operations and activities regulated by or under this Act;

(l) to ensure that international obligations entered into by the Government relative to the matters regulated by or under this Act are complied with;

(m) to advise the Minister on the formulation of policy in relation to matters regulated by this Act, and in particular in relation to such international obligations;

(n) otherwise to advise the Minister on any matter connected with its functions under this Act;

(o) to formulate and implement the policies and strategies with short-term and long-term objectives, in relation to the activities regulated by this Act;

(p) to perform such other functions as may from time to time be assigned to it by the Minister.”

Moreover, the Malta Resources Authority Act identifies the following additional specific functions in relation to energy:

“(i) promote, encourage and regulate the harnessing, generation and use of all forms of energy; and

(ii) encourage the use of alternative sources of energy and for such purpose in accordance with such regulations as may be prescribed, to impose levies on energy produced by non renewable sources and grant subsidies in connection with the production of energy from renewable sources.”

The Minister may after consultation with the Authority make regulations in respect of any of the functions of the Authority or for the better carrying out of any of the provisions of the Act (Malta Resources Authority Act, Art. 28(1)).

2.2 Enforcement Powers of the Authority

Any person who contravenes any of the provisions of the electricity or gas market regulations or of a licence can be found guilty of an offence and is liable to a fine of not more than 23 thousand Euros.

In addition, any person who:

- (a) fails to abide by the provisions of a compliance order issued by the Authority;
- (b) gives any false, inaccurate or misleading information;
- (c) supplies incomplete information;
- (d) fails, without reasonable cause to supply information requested within the time given;
- (e) prevents or hinders any investigation;
- (f) produces or furnishes, or causes or knowingly allows to be produced or furnished, any document or information which he knows to be false in any material respect,

can be found guilty of an offence and on conviction is liable to a fine of between 230€ and 2300€.

In addition to the fines mentioned above, where any person fails to comply with the provisions of the electricity or gas market regulations for a period exceeding six months, the competent authority may revoke his or her licence.

2.3 Independence of the regulator

Article 7(1) of the Malta Resources Authority Act (Cap.423) states that the Malta Resources Authority is a body corporate having a distinct legal personality and may enter into contracts, of acquiring, holding and disposing of any kind of property for the purpose of its functions, or suing and being sued, and of doing all such things and entering into all such transactions that are incidental and conducive to the exercise or performance of its functions.

The Minister responsible for resources may, in relation to matters that appear to him to affect public interest, from time to time give to the Authority directions in writing of a general character on the policy to be followed by the Authority. (Malta Resources Authority Act, Art 6(1))

2.4 Accountability

The financial estimates and annual report on the proceedings and policy of the Authority are scrutinised in the first instance by the Minister responsible for Resources who presents a copy of the estimates and reports on the Table of the House of Representatives (Malta Resources Authority Act, Art. 24).

Article 6(2) of the Malta Resources Authority Act (Cap.423) states that the Malta Resources Authority shall afford to the Minister facilities for obtaining information with respect to its property and activities and furnish him with returns, accounts and other information with respect thereto, and afford to him facilities for the verification of information furnished in such a manner and at such times as he may reasonably require.

2.5 Overlapping Jurisdictions with other Governmental agencies/authorities

In the case of regulating market competition, operators in the electricity sector are subject to regulation by the Malta Resources Authority under the Malta Resources Authority Act (Cap. 423) and the Competition Act (Cap. 379).

The Competition Act (Cap. 379) prohibits any agreement between undertakings, any decision by an association of undertakings and any concerted practice between undertakings having the object or effect of preventing, restricting or distorting competition within Malta. The Competition Act also prohibits any abuse of a dominant position by one or more undertakings.

The Office of Fair Competition within the Ministry for Competitiveness and Communications is the competent authority in such cases. However, the Office of Fair Competition consults with the Malta Resources Authority on any case involving the energy sector.

In the execution of its powers MRA has to consult with other competent authorities depending on the specific issues such as the Malta Environment and Planning Authority (MEPA), Malta Maritime Authority (MMA) and the Malta Standards Authority (MSA).

2.6 Main Developments in the gas and electricity market

Between July 2004 and July 2005 two EU directives were transposed to Maltese Law. Below is a list of the regulations which came into effect during the said period:

LN 432 of 2004 – Natural Gas (Marketing) Regulations, 2004 which give effect to Directive 2003/55/EC of the European Parliament and of the Council of the 26th June, 2003 concerning common rules for the internal market in natural gas and repealing Directive 98/30/EC.

LN 511 of 2004 – Electricity Regulations, 2004 which give effect to Directive 2003/54/EC of the European Parliament and of the Council of the 26th June, 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC. These regulations are still subject to approval of the requested derogations in relation to the directive.

2.7 Major Issues dealt with by the regulator

The regulator has dealt with two major issues during the reporting period. The first issues concerned the participation on in the request for derogations in relation to Directive 2003/54/EC concerning the internal market of electricity.

A second major issue dealt with by the regulator was Decision Notice 03/05/ED of the 24th June 2005 in virtue of the Malta Resources Authority Act (Cap. 423) on the Complaint of Verdala Mansions Limited against Enemalta Corporation with regard to the funding of the new sub-station at Rabat, Malta.

3 Regulation and Performance of the Electricity Market

3.1 Regulatory Issues [Article 23(1) except “h”]

3.1.1 General

Since 1977, the provision of electricity in Malta has been handled almost exclusively by Enemalta Corporation through the Enemalta Act (Cap.272). As the Enemalta Corporation is also responsible for the importation and distribution of petroleum products (market will be liberalised end December 2005), it is both vertically (within the electricity supply chain) and horizontally (combining electricity and non-electricity activities) integrated.

Further to the EU accession, the electricity industry in Malta is going through a process of change, driven principally by the necessity to comply with the requirements of EU Directive 2003/54/EC concerning common rules for the internal market. In this sense Malta has transposed the said EU Directive into Maltese Law through the Legal Notice 511 of 2004, Electricity Regulations 2004.

Currently, a single operator, Enemalta Corporation, carries out the distribution and supply of electricity. The highest voltage in Malta is 132kV and the area covered is small. The splitting of the supply and distribution functions would create substantial problems in the context of the small size of Malta. Consequently Malta has applied for derogations from certain aspects of the Directive 2003/54/EC, in particular that concerning the liberalisation of the electricity supply market. Malta's electricity system (because the consumption was below the threshold 3,000 GWh in 1996 and because of the fact that the electricity sector is not connected to other systems) is considered as a "small isolated system" according to the definition given in Article 2 of the said Directive.

In view of the above, Malta is requesting derogations from the Electricity Directive 2003/54/EC so that the implementation of articles 20 and 21 of the Directive is conditioned by the practical limitations of a small isolated system and that the rules for the organisation of the market be designed appropriately.

In particular, Malta is requesting that:

- (a) Malta shall not be required to comply with Article 21(1), considering the difficulties and expenses of trying to introduce free competition in Malta;
- (b) Malta derogates from Article 20(1) in consistency with the derogation from Article 21(1);
- (c) the Commission recognises this situation in its application of Article 28 (monitoring and reporting by the Commission); and
- (d) Malta is not requested to create elaborate market structures and systems that are designed to support a free market structure, but will implement the necessary regulatory structures to prevent abuse of dominant position, particularly with respect to vulnerable and small customers, and to ensure the viability of an economic and secure electricity supply.

For this reason the market is not open.

In addition, Malta is requesting derogation from Chapter IV of the Directive 2003/54/EC. Since Malta does not possess a transmission system as defined in the Directive, it cannot for practical reasons implement the provisions of Chapter IV (in the sense that it is not possible to designate a transmission system operator in terms of article 8 of the Directive and to ensure compliance with Articles 9 to 12 of the Directive since there is no transmission system).

3.1.2 Management and Allocation of interconnection capacity and mechanisms to deal with congestion

The electricity network in Malta is not connected to any network of other EU Member States or any other State.

3.1.3 The regulation of the tasks of the transmission and distribution companies

3.1.3.1 Introduction

As already explained above, there is only one distribution system in Malta and there are no interconnections with any other system. A derogation from the requirements of the Chapter IV of the Electricity Directive has been requested from the Commission.

Malta has also opted not to implement Article 15 of Directive 2003/54/EC which requires legal managerial unbundling between the distribution system operator and the rest of the electricity business, by virtue of the exemption for small isolated systems inbuilt in the second paragraph of Article 15.

3.1.3.2 Network Tariffs and connection fees

No grid-connected (non-micro) generators have been installed to date in Malta, although there seems to be intent to request authorisation by the private sector. Although Enemalta Corporation has not published any network tariff for the use of the electricity network by other generating companies, the question is largely academic since third party access to the network will only be possible for off-site auto-producers.

Connection fees are published in the Electricity Supply Regulations. All fees will be revised once the outcome of the negotiations have been concluded.

Connection mechanisms and payments for small PV systems are in place and functioning.

The role of the regulator in measuring quality of service

In line with requirements set by the Electricity Regulations 2004 (LN 511 of 2004), the Malta Resources Authority is responsible for the monitoring and reporting of customer interruptions and approving tariff methodology for compensation in case of default on the guaranteed standards.

Enemalta is in the process of drafting enhanced standards of service in compliance with MSA EN50160.

Continuity of supply

Notwithstanding the fact that there are no formal standards regarding the monitoring of continuity of supply, the regulator still collects the data available. Unfortunately the main problem in producing standard continuity indices such as SAIFI, CAIDI and SIADI is the lack of information on the number of customers affected by a particular interruption. Information in this regard is limited and the number of customers affected can only be estimated. Enemalta Corporation is in the process of developing its IT system to cater for this requirement.

Table 3.1.3a Continuity of Supply Indicators

Type	CAIDI ¹ (hours)	SAIFI ² (per 100 customers)	SAIDI ³ (hours)	KVAh Lost	Normalized Lost KVAh	TIEPI ⁴ (hours/kVA)
Overall	1.71	541	9.27	10,253,805	0.001058048	0.01175
Fault	2.08	230	4.77	5,282,550	0.000545085	0.00670
Shedding	1.40	239	3.34	3,693,910	0.000381159	0.00352
Switching	0.16	25	0.04	44,559	0.000004598	0.00006
Works	2.36	47	1.11	1,232,786	0.000127206	0.00148

source: Enemalta Corporation

¹ CAIDI index is the “Customer Average Interruption Duration Index” and measures how long it takes a utility to restore service after an interruption and is scored by adding up the durations of each service interruption in a year and dividing the total by the total number of customer service interruptions, thereby deriving the average outage duration for that year. This is only an estimate since customers connection data is not available and hence calculated on the assumption that number of customers connected to a substation is proportional to the kVA installed. (hours)

² SAIDI index which stands for “System Average Interruption Duration Index” indicates how long in a year energy is not supplied (average per 100 customers) which gives an estimate of the cumulative yearly duration of interruptions per customer generally referred to as Customer Minutes Lost.

³ SAIFI index is the “System Average Interruption Frequency Index” and indicates how many times in a year energy is not supplied which is an estimate of the number of outages per customer in a year, termed customer interruptions.

⁴ TIEPI: hours lost per year, weighted by the installed transformer capacity

The calculations of continuity indicators in table 3.1.3a have been submitted by Enemalta Corporation and are based on the substation interruption reports for the year 2004. There have been 557⁵ Interruption minutes lost per customer during 2004. The data regarding the number and type of customers supplied from each substation is not available and an assumption is made that the number of customers connected to each substation is proportional to the kVA installed.

The interruption records kept by Enemalta Corporation and supplied to MRA are classified as follows:

- Faults which include naturally occurring faults and induced faults such as cables damaged by contractors;
- Shedding normally refers to interruptions due to faults on the generation side;
- Switching interruptions are generally due to load shifting and safety measures; and
- Works usually refer to planned interruptions.

To date the MRA can only monitor continuity of supply at substation level since data on interruption of the individual low voltage feeders smaller than 1000V is not submitted by Enemalta Corporation. The interruption data is generally recorded manually and logged in a database. MRA is supplied with short and long interruptions. No automatic re-closure systems exist in the distribution network hence transient interruptions do not occur.

Information available to market participants

The following information is available to market participants:

- network connection charges for final customers published in the Electricity Supply Regulations;
- Retail tariff charges published in the Electricity Supply Regulations.
- Procedure used to calculate billing published in the Electricity Supply Regulations;
- Procedure for suspension of supply for non-payment published in the Electricity Supply Regulations;
- Planned interruptions published in Enemalta Corporation website;
- All regulations and legal notices related to electricity are also available on the Malta Resources Authority's website; and
- Information regarding methods of payment and fuel mix is available in the bill invoiced to customers.

3.1.3.3 Balancing

There is only one generating company and one supply company therefore balancing is not applicable.

⁵ Including interruptions caused by failure in generation plant

3.1.4 Effective unbundling

In order to ensure the transparent and non-discriminatory operation, specific provisions to unbundle the internal accounts of the different businesses of Enemalta Corporation are underway and are being carried out to comply with the directive 2003/54/EC. Access to the internal accounts will be given to the regulator in order to avoid possible discrimination and distortion of competition. There are no other unbundling obligations on the Enemalta.

3.2 Competition Issues [Article 23(8) and 23(1) (h)]

3.2.1 Description of the wholesale market

Subject to approval of the derogations requested by Malta regarding the opening of the supply market, Malta has designated Enemalta Corporation as the sole supplier responsible for supplying electricity to final customers.

Producers may use electricity they produce themselves and, or sell it to Enemalta. In practice, only Enemalta Corporation is producing electricity in Malta. Therefore in effect there is no wholesale market in Malta.

3.2.2 Description of the retail market

Enemalta Corporation is the sole supplier of the electricity to final customers in Malta and has the whole market share. Consequently the concept of customer switching does not apply for Malta since there is only one supplier.

The total number of customers supplied by this distribution network is approximately 246,000 and these are distributed as follows:

- Domestic: 212,000
- Industrial: 2,000
- Commercial: 32,000

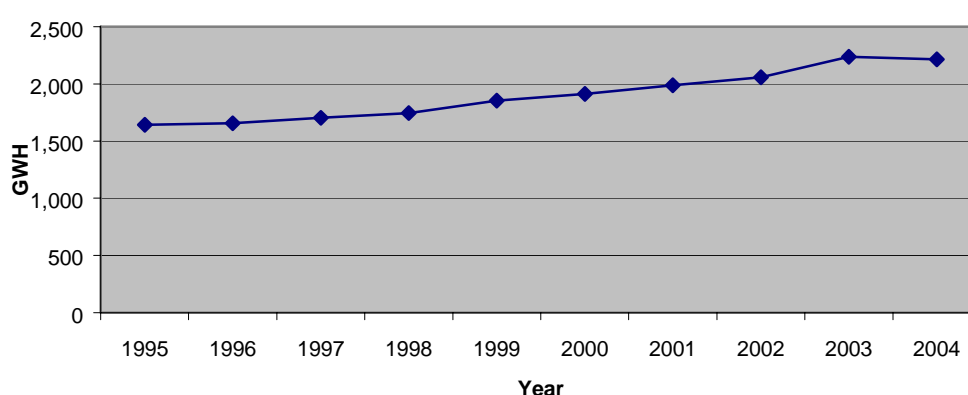
Table 3.2.2 Development of the retail market

Year	Total consumption (TWh)	No. of companies with >5% retail market	Number of <u>fully</u> independent suppliers (1)	Market share of three largest companies			Cumulative % customers having changed supplier (by volume)		
				large and very large industrial	small-medium industrial and business	very small business and household	large and very large industrial	small-medium industrial and business	very small business and household
2001	1.988	1	0	100%	100%	100%	0%	0%	0%
2002	2.057	1	0	100%	100%	100%	0%	0%	0%
2003	2.236	1	0	100%	100%	100%	0%	0%	0%
2004	2.216	1	0	100%	100%	100%	0%	0%	0%

The annual electricity demand has seen a considerable and constant increase over the last few years. The graph below (Graph 3.1) shows the total annual production of electricity in Malta between 1995 and 2004. The total electricity generated during the calendar year 2004 was **2.216 TWh**.

As can be seen there has been a considerable rise in electricity demand over the last few years. During the mid 1990s period, that is, between 1995 and 1998 the annual growth in electricity demand was of 36.3 GWh/year, equivalent to a 2.15% annual increase. However, from 1999 onwards the annual growth rate in electricity demand has risen to 81.29 GWh/year, or an annual increase of 3.9%. This sharp increase is mainly attributed to the increased penetration rate of certain commodities such as air-conditioning units in the domestic and commercial sector. Presently, the consumption of electricity is split approximately equally between the domestic, commercial and industrial sectors.

Graph 3.1 – Total Electricity Generated in GWh



source: Enemalta Corporation

Present retail tariffs

The retail tariffs in Malta are regulated by the Electricity Supply Regulations. Table 3.2.2a gives an approximate breakdown of end user electricity prices for the specified typical customers based on the Standard Consumer Definitions. A rate of exchange of €/Lm 2.32 is used.

Table 3.2.2a Approximate breakdown of retail price levels

Eurostat Customer Definition	Dc €/MWh	Ib €/MWh	Ig €/MWh
Energy costs and supply margin ⁶	75	103.57	59.78
Taxes and excise duty	4	5.43	3.21
Total (including all taxes)	79	109	63

⁶ Including network charges and payment to regulator.

3.2.3 Measures to avoid abuses of dominance

There is no wholesale market in Malta and the conduct of the sole generating company in Malta is subject to regulation by the Malta Resources Authority under the Malta Resources Authority Act (Cap. 423) and the Competition Act (Cap. 379). The same Acts will also regulate other future generating companies.

The Competition Act (Cap. 379) prohibits any agreement between undertakings, any decision by an association of undertakings and any concerted practice between undertakings having the object or effect of preventing, restricting or distorting competition within Malta. The Competition Act also prohibits any abuse of a dominant position by one or more undertakings.

The Office of Fair Competition is the competent authority in such cases. However, the Office of Fair Competition consults with the Malta Resources Authority on any case involving the energy sector, and vice-versa.

3.2.3.1 Details of surveillance of electricity markets to detect possible abuses

The Malta Resources Authority has the power to monitor compliance of licensed operators in the sector, in particular with regard to its function, which is to ensure fair competition in all practices, operations and activities in the sector. The Authority has the power to collect information on any aspect of the operations of the licensees and to approve, a priori, tariff structures of operators.

The Office of Fair Competition has the power to gather any information which is necessary to identify abuses and carry out investigations of its own motion or upon receiving a reasonable allegation in writing.

3.2.3.2 Measures to avoid abuses towards the customer

Schedule III of Regulation 23 of the Electricity Regulations 2004 (LN 511 of 2004) states that the electricity service provider shall provide customers with transparent information on applicable prices and tariffs and on standard terms and conditions in respect of access to and use of electricity services.

In this same schedule, the rules for a contract structure are listed down as measures on customer protection for household customers. The contract is an indefinite contract which can be terminated by the customer on request. Although conditions for contract structure have been transposed from the electricity directive into the electricity regulations, a number of these conditions are still in the process of being implemented. In this regard, Enemalta is currently working on a customer charter which should also include a revised version of the contract and compensation relating to quality of service.

The Electricity Supply Regulations on the other hand, lists a number of conditions and penalty clauses which affect the customer. Amongst these clauses are listed a number of conditions and relative penalties for inappropriate use of the electricity supply and general conditions which the customer must observe.

4 Regulations and Performance of the Natural Gas Market

Currently there exists no internal natural gas market.

5. Security of Supply

5.1 Electricity [Article 4]

5.1.1 Current available generation capacity

Enemalta Corporation is the only electricity public generating business currently present on the Maltese Islands. It owns two power stations at Marsa and Delimara. Their nominal installed capacity is of 267 and 304 megawatts respectively; therefore the total installed nominal capacity in the electricity market is of 571 megawatts (0.571 GW). The table below (Table 5.1.1) provides a breakdown of the amount of capacity installed per technology.

Table 5.1.1 – Installed nominal capacity per technology

Technology	Installed Nominal Capacity (MW)
Steam Turbine	350
Open Cycle Gas Turbine	111
Combined Cycle Gas Turbine	110
Total	571

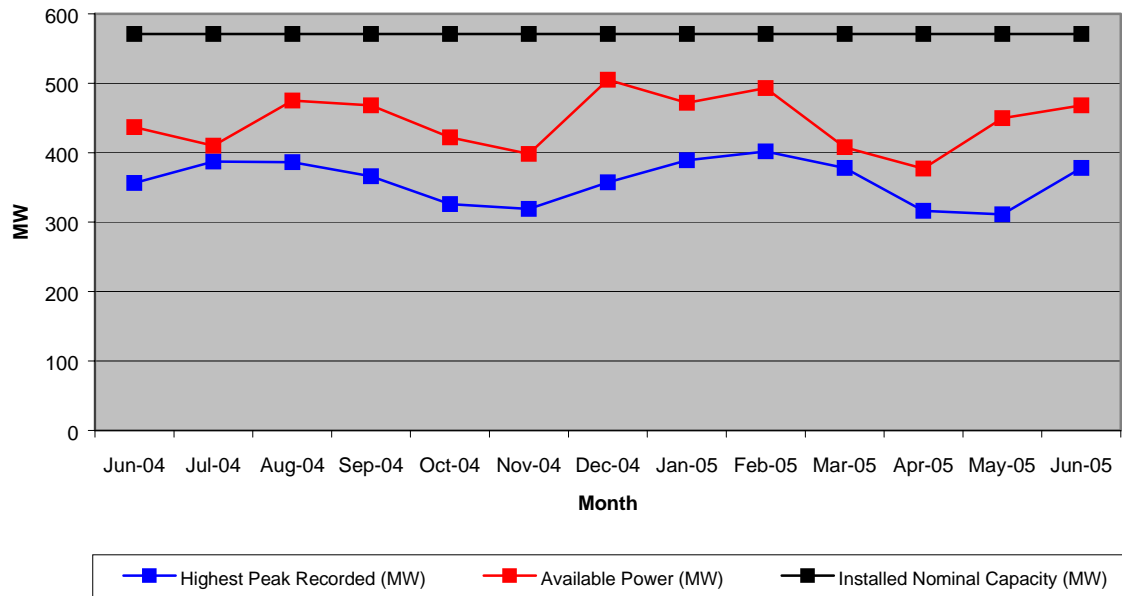
source: Enemalta Corporation

Although the nominal installed capacity is of 571 MW, due to 'Forced Outages', unplanned shut downs, 'Overhauls' and de-rating of units the actual available generation capacity is for most of the time of the year lower than this 571 MW benchmark.

Graph 5.1 illustrates the available power and the monthly highest peak recorded during the last twelve months between June 2004 and June 2005. Also shown is the installed nominal capacity during this period. The graph confirms how during periods of high demand, such as December for winter and August for summer, availability was at its maximum considering any "Forced Outages" which might have occurred. During this period the lowest actual reserve margin (i.e. compared to the actual available power after considering planned shutdowns and maintenance) was of 5.6% in July 2004.

The actual reserve margin is of particular concern as regards security of supply, since the deficiency left behind by any forced shutdown of a generating set has to be filled in either by spinning reserves already present on the network or by fast start up of other generating sets, typically open cycle gas turbines, given their low start up time.

Graph 5.1 – Available power in MW for the period between June 2004 and June 2005

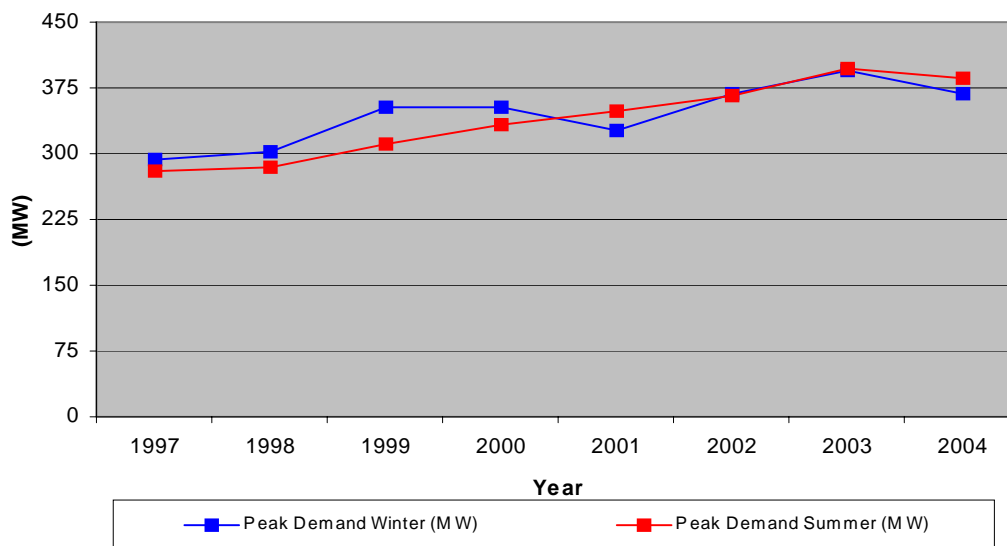


source: Enemalta Corporation

5.1.2 Current level of peak demands

The changing climatic conditions that characterize the Maltese whether have a significant effect on the demand for electricity. The increased use in air-conditioning units in summer has made winter and summer electricity peak demands get very close to one another. The graph below (Graph 5.2) summarises the peak demands recorded during summer and winter between 1997 and 2004.

Graph 5.2 Seasonal Electricity Peak Demands

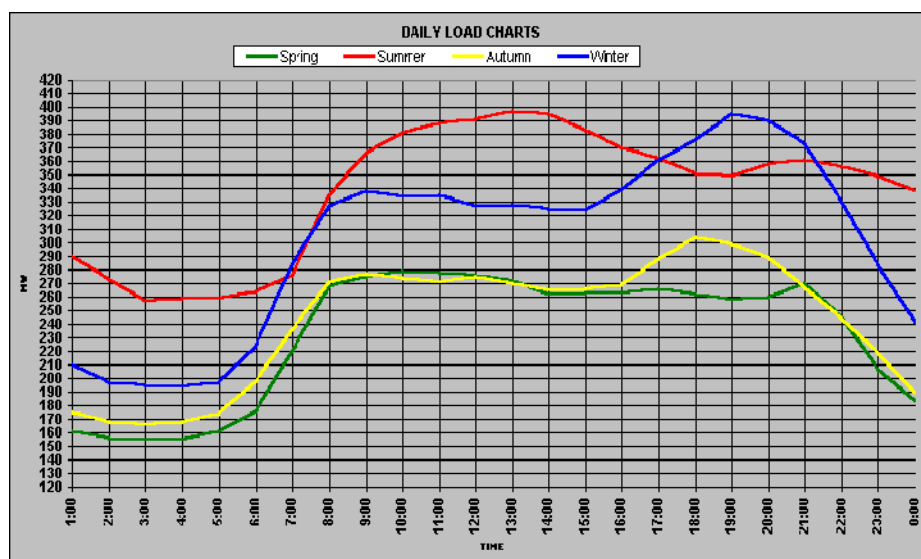


source: Enemalta Corporation, Enemalta Annual Reports 1997-2004

Apart from the magnitude of the peak, one other problem that affects the network is the duration of the peak. Graph 5.3 shows four different load profiles describing how the load varies during the arc of 24 hours for spring, summer, autumn and winter.

In winter, the load is at a low level during the early hours of the morning and reaches a first peak during the early to mid morning and reaches a second peak in the winter load then occurs during the early evening as meals are prepared and domestic heaters are switched on. On the other hand, the load profile in summer is characterised by the fact that is almost constant throughout the day, with a peak demand in the form of a big plateau between 1000 and 1500hours, mainly due to the increased use of refrigerating and air-conditioning units during this period of the day. Spring and autumns, as might be expected given their mild weather, have both lowest consumption and peak demands.

Graph 5.3 Load Profile for all four seasons



source: Enemalta Corporation

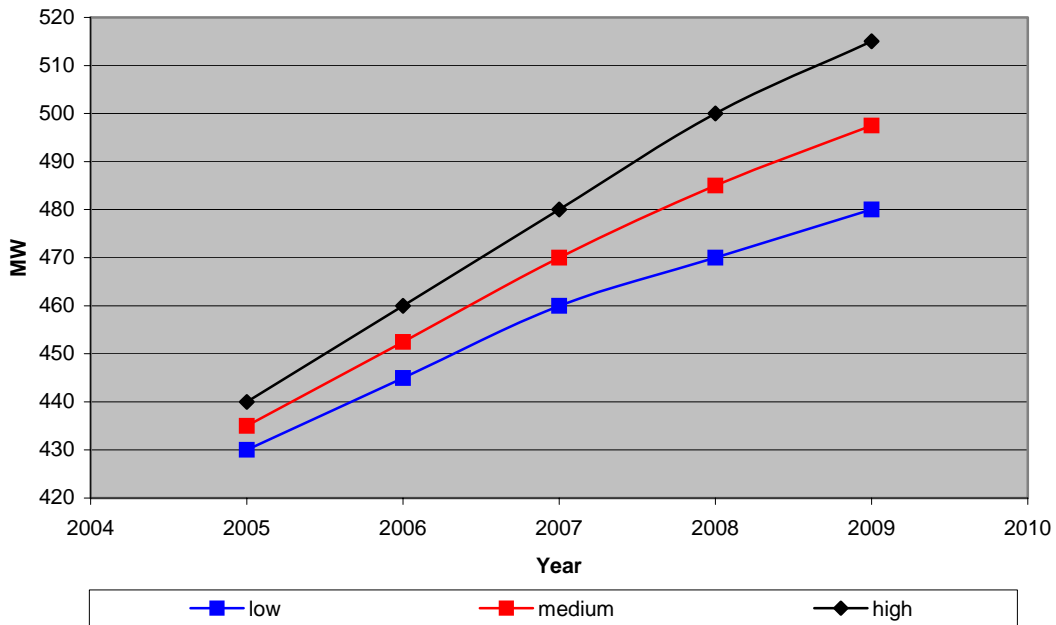
5.1.3 Demand projections for the forthcoming years (2005-2009)

Malta's electricity system is a small isolated system. The load demand suffers from severe peaks and troughs. Since the system is isolated, these changes in demand have to be catered for by the local generating capacity. Forecasting is therefore easily over-influenced by one major project or decision.

Based on past demand growth rates Enemalta produced a forecast for electricity demand between 2005 and 2009 using three different growth patterns: high, medium and low.

The high pattern growth assumed an initial annual growth rate in demand of 4.5% progressively decreasing down to 3% in 2009. The medium pattern assumed an initial annual growth rate of 4% progressively decreasing down to 2.5% in 2009. The low pattern assumed an initial annual growth rate in demand of 3.4% progressively decreasing down to 2.1% in 2009. The following graph (Graph 5.4) illustrates the results of the forecast analysed for the three demand scenarios between 2005 and 2009.

Graph 5.4 Annual Forecasted Peak Demands up to 2009



source: Enemalta Corporation

The analysis forecast suggests that by 2009 the maximum peak demand will probably be little short or even exceed 500 MW. This forecast indicates that by this period the available reserve margin will only be of 12.4% of the total installed capacity.

In order to meet such demands Enemalta, as the distribution system operator, is presently involved in a number of projects to upgrade the network

5.1.4 Forthcoming generation investment for the next three years

5.1.4.1 Authorised

At present, there are neither authorised nor 'in process of authorisation' generation investments although intent has been expressed to MRA by both Enemalta and the private sector.

5.1.4.2 Actually in process of construction

At present, there are no generation projects under construction.

5.1.5 Current generation fuel mix and expected developments

Both power stations rely fully on the use of imported fossil fuels. Based on the nominal installed capacity for the electricity market, the fuel mix is of 350 megawatts (or 61% of the total nominal installed capacity) supplied by Heavy Fuel Oil, with the remaining 221 megawatts (or 39% of the total nominal installed capacity) supplied by Light Distillate (Diesel) Oil. However, based on fuel costs considerations, fuel oil during these last years has accounted for more than 90% of the annual electricity demand, with the remainder being supplied by Diesel Oil. As regards the fuel mix, fuel oil is expected to remain the only source of fuel in the foreseeable future

Even though heavy fuel oil is expected to remain the highest contributor to the generation fuel mix, the consumption profile is expected to shift towards the less polluting fuels as measures to improve air quality are implemented. Also, Malta's future intentions to introduce renewable energy will contribute to a marginally improved diversity in the generation fuel mix.

5.1.6 Actual investments commissions / or retired during 2004

During 2004, no new plant was commission nor was any existing plant retired and the nominal capacity remained at 571 megawatts.

5.1.7 Authorisation criteria for new generation investment

Any company may construct and operate a generation plant provided it complies with the planning, environmental and energy supply criteria established by Maltese Law. However, the developers need an authorisation, which in Malta can only be granted by the Malta Resources Authority. The authorisation can be granted or refused on the basis of the following criteria listed in Schedule 2 of the Electricity Regulations, 2004 (LN 511 of 2004):

“An application for an authorisation may be determined by the Authority in accordance with the following criteria:

(a) that the Authority is satisfied that, if it grants the authorisation, no activity carried out under it will adversely affect the safety and security of the electricity system;

(b) that the Authority is satisfied that, if it grants the authorisation, energy will be used efficiently in the course of any activities carried out under the authorisation;

(c) that the Authority is satisfied that the applicant will comply with any distribution code in so far as it is applicable to the applicant and that, at the relevant times, will have the capability of doing so;

(d) that the Authority is satisfied that the applicant has commenced, or will at the appropriate time commence, to apply for all applicable legal consents necessary for the construction of the plant to which the application relates, and in particular any consent related to:

- (i) public health and safety;*
- (ii) safety and security of the electrical system;*
- (iii) protection of the environment, including the limitation of emissions to the atmosphere, water or land;*
- (iv) siting of the generation plant and land use;*
- (v) efficient use of energy; and*
- (vi) nature of the primary source of energy to be used in the generation station;*

(e) that the Authority is satisfied that the generating station to which the application relates will be constructed and commissioned within a period which the Authority shall specify in relation to each application;

(f) that the Authority is satisfied that the generating station to which the application relates will be capable of providing an appropriate level of ancillary services being the

services necessary to ensure the stable and secure operation of the electricity system, including the provision of spinning reserve, reactive power, frequency control or black start capability, as specified by the Authority in the authorisation;

(g) that the Authority is satisfied that the applicant is a fit and proper person to be granted an authorisation and has the financial capacity and technical skills to carry out the activities to which the application relates and to comply with the authorisation, if granted;”

(h) that the Authority is satisfied that the applicant will be capable of complying with any regulations that have been made by the Minister under article 28 of the Malta Resources Authority Act, in particular regulations relating to public service obligations and customer protection.”

If the circumstances so require, new generation capacity may also be constructed following a tendering procedure. Such tendering procedures may come into action based on two criteria listed in 22(2) of the Electricity Regulations 2004:

- i. “if, on the basis of the authorisation procedure, the generating capacity being built together with the energy efficiency/demand-side management measures being taken are not sufficient to ensure security of supply. Provided that consideration is to be taken of electricity supply offers with long-term guarantees from existing generating units, provided that additional requirements can be met in this way; or*
- ii. in the interest of protection of the environment or promotion of infant new-technologies if these objectives are not being met.”*

It is the role of the resources authority to establish when any of these criteria are to be met, and hence advise the minister responsible for resources of such requirements.

5.1.8 Long Term Planning

The Electricity Regulations permit the tendering for new generation capacity if, on the basis of the authorisation procedure, the generating capacity being built together with the energy efficiency/demand-side management measures being taken are not sufficient to ensure security of supply

5.1.9 Mechanisms for rewarding capacity

At present, there are no mechanisms to reward capacity.

5.1.10 Major infrastructure projects

5.1.10.1 Gas pipeline from Sicily (Italy)

Shortly a feasibility study will be undertaken on the possibility of importing natural gas to Malta using a pipeline.

The main objective of this natural gas supply will be to convert all existing power generation units to natural gas fuel, leaving liquid fuels for power generation only as a back up. Additionally the gas pipeline will also serve as a set-up for future generating equipment to work on natural gas.

5.1.10.2 Feasibility study on Malta-Sicily electricity link

A new study on the interconnection of the Maltese grid to Sicily will be soon commissioned considering Malta as an EU Member State.

Table 5.1.2 Security of Supply evolution

Year	Peak electricity demand (GW)	Available capacity ⁷ (GW)	Forthcoming new plant (GW)		Plant completed minus plant closed in the year (GW)				
			Authorised	Under construction	coal and oil	gas	RES	CHP	nuclear
2000					0	0	0	0	0
2001					0	0	0	0	0
2002					0	0	0	0	0
2003					0	0	0	0	0
2004					0	0	0	0	0
2005	402	571	0	0					
2006 ⁸ est	445	571	0	0					
2008 est	470	571	0	0					
2010 est	480	571	0	0					

5.2 Gas [Article 5]

Currently there is no natural gas in Malta.

⁷ Nominal installed capacity

⁸ Enemalta Corporation has the intent to install 40MW of new plant. However, no formal application for an authorisation has been submitted.

6 Public Service Issues [Article 3(9) electricity and 3(6) Gas]

6.1 Introduction

There is no natural gas in Malta. For electricity, no obligations on market participants as regards public service have been specified.

The Electricity Regulations establish rules for the safeguarding of customer rights. Although the directive has been transposed, a number of issues, especially those relating to public service obligations still have to be implemented.

6.1.1 Labelling for Primary Energy Sources

Regulation 23 of the Electricity Regulation 2004 states that suppliers have to provide their final customers with information in or with their bills and in promotional materials about the contribution of each energy source to the overall fuel mix of the supplier over the preceding year.

As required by the electricity regulations, the final customer finds in his bill the contribution of each primary energy source to the overall fuel mix of the supplier.

6.1.2 Implementation of Annex A (Directive) Criteria

Individual issues covered in Annex A are, mostly, currently implemented through legislative instruments, in particular the Electricity Supply Regulations which specify inter alia the services and maintenance provided, applicable tariffs, and conditions for termination and renewal. A comprehensive contract which covers all the requirements of the annex in one consolidated document is currently being drafted.

6.1.3 Appropriate Treatment of Vulnerable Customers

Regulation 33 of the Electricity Supply Regulations (GN 223 of 1940) specifically lists down measures to protect and help vulnerable customers. It states that if a customer satisfies conditions listed down by the Director of Social Security, he or she is eligible for a subsidised tariff for consumption of electricity.

In addition, vulnerable customers who are unable to pay their bills when they become due are assisted by Enemalta to pay by instalments so as to avoid disconnection.

6.2 Number of disconnections for non-payment

During 2004 there were 1,366 cases of disconnection due to non-payments.

6.3 Ongoing maintenance of end user price regulation

Electricity tariffs for final customers are all regulated and are published in the Electricity Supply Regulations by the Minister responsible for Enemalta, in consultation with the Minister responsible for Resources. The last revision of retail

prices of electricity for final customers was published by Legal Notice 132 of 2005 which amended the Electricity Supply Regulations.

Table 6 Regulation of end-user prices

	Electricity			Gas			
	large and very large	medium industrial and commercial	small commercial and household	power plants	large and very large	medium industrial and commercial	small commercial and household
Existence of regulated tariff (Y/N)	Y	Y	Y	N/A	N/A	N/A	N/A
% customers still on tariff	100%	100%	100%	N/A	N/A	N/A	N/A
possibility to switch back to regulated tariff (Y/N)	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Number of suppliers covered by the obligation to supply at tariff (could be all suppliers)	100%	100%	100%	N/A	N/A	N/A	N/A

6.3.1 Price Caps

N/A.

6.3.2 Compensation to the supplier for Public Service Obligation

The supplier is bound to supply electricity at tariffs published in the Electricity Supply Regulations.

6.3.3 Last Resort Supplier

No supplier of last resort is appointed since there is only one supplier.

6.4 Role of the regulator in ensuring transparency of the terms and conditions of supply contracts

Among its functions the Malta Resources Authority has to monitor the market to ensure an appropriate level of transparency and competition. The organisation of the market is still being decided (e.g. derogations from Directive 2003/54/EC under discussion). If and when disputes on the terms and conditions of supply contracts arise, they will be tackled in connection with the competition authorities.