



# Israel Public Utility Authority's (Electricity) biennial activity report

2012-2011







### Editor: Nurit Felter-Eitan, Authority Secretary & Spokeswoman

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#### Greetings,

I am delighted to hereby present the Israel Public Utility Authority's (Electricity) biennial activity report for the years 2012-2011. This report summarizes the Authority's Assembly's extensive and meticulous work, assisted by the Authority's team of professional employees, over the past two years, signifying a turning point in the Israeli electricity and energy markets.

Alongside a severe energy crisis that befell the electricity market in the past two years due to the discontinuation of natural gas supply from Egypt and the creation of a gas supply monopoly, these years have seen a historic

change in the electricity market, commencing with the admission of private electricity entrepreneurship and clean electricity production in significant capacities (the Authority's projection for private electricity production is 25% by 2016, and approximately 10% for electricity production using renewable energy by 2020).

As a result of the natural gas crisis, which began in 2011 due to recurring explosions in the gas lines leading from Egypt to Israel, the Electricity Authority was faced with a reality that would have forced it to instantly and radically increase in the electricity tariffs for the Israeli consumers in 2012.

These circumstances led the Authority to combine forces with government bodies, including the Ministry of Finance, the Ministry of Energy and Water Resources and the Ministry of Environmental Protection, and lead a comprehensive move which significantly restrained the tariff increase, and furthermore, relieved the electricity consumers' burden in a manner that enabled spreading the tariff increase over three years. The government's distribution layout included providing government guarantees to the Israel Electric company (IEC) as cash flow backup caused by the crisis, and in addition, lowering taxes on alternative fuels in order to alleviate the costs of these fuels.

This layout saved the consumers 6.5 billion NIS, and spread out the sharp increase of the electricity tariff.

Simultaneously, close collaboration between the Authority and the Anti-Trust Authority towards greatly modified the agreement terms between the 'Tamar' Gas Field (which became the sole gas supplier due to the gas crisis) and the IEC and private electricity suppliers, for the next 15 years. These agreements have an estimated value of approx. 15 billion dollars to 'Tamar'. The Authority refused to assign these costs to the electricity consumers without revising them, thus protecting the consumers' interests in the procurement of gas. The Authority's intervention was mostly directed at reducing the minimal gas quantities undertakings (take or pay basis) in the agreements which were submitted for its approval, for the purpose of freeing gas quantities for a future new gas suppliers thus promoting competition and minimizing costs. In addition, the Authority rejected the irregular costs included, in its view, in the agreement with the IEC.

The Authority's intervention in the natural gas agreement is estimated to have saved the electricity consumers and the IEC at least 1 billion dollars over the next decade, leaving a



promising economic prospect for new gas suppliers much sought after in the natural gas market.

In addition, in the last two years, government work and regulation determined by the Electricity Authority helped mature conditions for competition and paved the way for the historic integration of private electricity producers in the electricity market. During the period pertaining to this report, the Electricity Authority oversaw the financial closings of electricity production projects in a scope of approx. 3 billion dollars (!) in conventional and cogeneration production technologies. As a result, the Israeli electricity production market is expected to drastically change over the course of the next few years, with no less than 2,500 MW of private electricity production (25% of total electricity production) as soon as 2016.

The last two years have seen the birth of another young electricity industry, the green industry. In accordance with government resolutions, the Electricity Authority has completed laying the economic regulation foundation for approx. 3,000 MW of electricity production using renewable energy with clean technologies in order to meet the governmental goal of 10% electricity production by renewable energy in Israel. The Authority handled more than 700 license applications in this field, which have turned into hundreds of MW of clean electricity production already produced in the Israeli electricity grid. At the same time, the electricity Authority worked towards maintaining the electricity consumers' interests and reducing the sums paid to these entrepreneurs as are integrated in the electricity tariffs. In light of the drastic price reduction in the cost of electricity production panels in photovoltaic technology as anticipated by the international market, the Authority also updated the payments made for this initiative as part of the electricity tariff. These actions by the Authority saved the consumers a vast 4 billion NIS.

And finally, during the time period pertaining to this report, the Authority expanded its activity determining 'smart consumption' arrangements for the electricity consumers. These arrangements define a monetary reward for those who reduce their electricity consumption. For example, the Authority defined a "conserve and save" arrangement for the home and general consumers, an arrangement thousands of consumers around Israel have been enjoying.

The electricity and energy utility markets have been experiencing great changes in the past few years - the natural gas revolution, green electricity industry penetrating the market and the strengthening status of private electricity producers. In the center of the Authority's vision is a rich, diverse and efficient market, affluent with high quality services and the players operating in it. The Authority is currently facing many challenges, both from a professional level and a sectorial level, and it is preparing for these changes regarding the IEC and the new players about to join this market.

My hope is that these developments will bring a positive change in the energy market for the benefit of the electricity consumers and the Israeli economy.

Respectfully,

Orit Farkash - HaCohen



#### Table of contents

Subj	ect:	page:
I.	Executive summary - activity report for 2011-2012	5 - 13
II.	Report - principle issues on the Electricity Authority's agenda	14 - 48
	1. The Electricity Authority's activities with the Israel	
	Electric Corporation (IEC)	14 - 18
	1. The fuel crisis in the electricity market and tariff distribution	
	2. The IEC's accountability	
	3. Supervision of production activities by the IEC	
	<ol><li>Implementing accounting principles in the company's reports</li></ol>	
	5. Reporting the gaps between the electricity tariff and the	
	company's actual expenses	
	6. Hiring international consultants for the consolidation of the	
	transmission and distribution tariff base	
	2. The creation of a gas monopoly in a world of Israeli discoveries -	19 - 23
	intervening in the gas agreements	
	1. Decision no. 1 by the Authority, meeting 377 -	
	intervening in gas agreements	
	2. Deepening the Authority's activities in the natural gas	
	procurement agreements for the benefit of the electricity	
	market's needs	
	3. Promoting renewable technologies electricity producers	24 - 34
	1. Promoting electricity production using renewable technologies	
	and implementing the government's resolutions	
	2. Reducing tariffs and minimizing costs for the electricity	
	sector 2011-2012	
	3. Forecast for upholding the government's goals for	
	2014 and 2020 under the current layout	
	4. Granting licenses to renewable energy electricity production	
	facilities during 2011-2012	
	5. Regulating "net metering"	
	6. The Kandel Committee and future regulations in the field of	
	renewable energy	
	7. Establishing the environmental protection department	
	4. Concerns regarding an electricity "drought and" consumer regulations	
	5. Private electricity producers entering the market	45 - 47
	1. Criteria for high and ultra high voltage	
	2. Confirming the activation of the Dalia power station,	
	examining and preventing cross costs between electricity suppliers	
	and the gas field	



6. Cha	allenges facing the electricity sector in 2013	48				
III.	The Authority's Assembly	49 - 51				
IV.	The Authority's key responsibilities and authorities according to the law	52 - 55				
	1. The Authority's departments					
V.		56 - 94				
••	Appendixes: the Authority's activity during 2011-2012					
	Assembly's decisions according to subjects:	56 - 68				
	ligation to consult					
	vate electricity suppliers					
Th	e Electric Corporation Licenses					
Re	gulations and tariffs of renewable energies					
Tai	iff updates - essential service provider					
Co	Consumer and supplier regulations for demand\ shortage					
ma	nagement Services Standards					
Eas	st Jerusalem Electric Company					
Na	tural gas in the electricity field					
2.	34 public hearings published by the Authority in 2011-2012	69 - 70				
3.	The Authority's consumer activity	71 - 77				
4.	Updating the criteria during 2011-2012	78				
5.	The Authority's activities - licensing and supervision according	79 - 81				
	to production technologies					
6.	PV technology conditional licenses table in the distribution grid 2011-2012	82 - 93				



### I. Executive Summary - report summary

The Electricity Authority's activities in 2011-2012 - Report

According to the instructions of the Electricity Market Law, 1996, since its establishment, the Authority has been working towards regulating the Israeli Electricity Market's activities. The years 2011-2012 were crisis years for the Israeli electricity sector due to the fuel crisis, but at the same time they also constitute a turning point that embodies challenges in shaping the face of the future Market from this point forward.

In accordance with these challenges, the significant activity growth continues in the various fields the Authority is involved with, as well as in several of the assembly's decisions, in the supervision of the Israel Electric Corporation's activities, in determining electricity tariffs, regulating private suppliers, regulating the field of renewable energy as far as licenses, tariffs and the actual implementation of government resolutions.

This is a time marked by shaping and regulating the future electricity sector in Israel and these significant changes in the Israeli energy sector have resulted in a significant rise in the Authority's activity scope.

A decisive year for the electricity sector					
The Electricity Corporation		Natural gas shortage	Gas agree- ments	A new phase in the field of renewable energies	

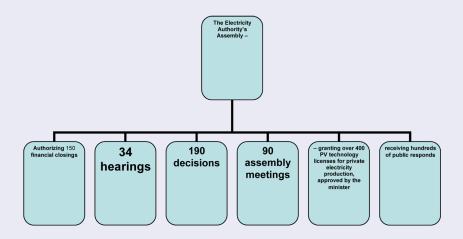
In a time of natural gas shortages which led to a dramatic increase in the electricity production's costs, the birth of the new renewable energy market, a massive entrance of private electricity and renewable electricity suppliers and challenges regarding the Electricity Corporation's financial status, the Electricity Authority's assembly and the Authority's team were required to invest great time-consuming resources and human resources in order to ensure a sustainable, reliable supervision of the electricity sector, based on minimizing costs for the benefit of the suppliers and consumers.

The Authority's responsibility and its implications on the energy sector and the Israeli economy cannot be overstated, in light of the task of determining the costs imposed on the electricity consumers; home, general and industrial. Given the Authority's significant role, it is the gatekeeper of the Israeli electricity consumer.

The Authority's assembly members and the professional team performed this extensive work by holding approx. 90 assembly and subcommittee meetings over the past two years. In 2011, the assembly and its committees held more than 50 meetings, in which 99 essential resolutions were made. In 2012, the Authority held approx. 50 assembly and committee meetings, where 97 resolutions were made. Over the course of these two years, a total of 190 essential decisions were made, 34 public hearings were published, pertaining to core issues, before a decision was made, with over 500 responds from the public. And as

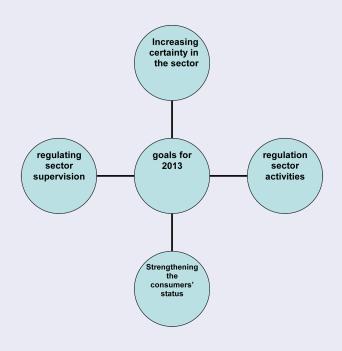


for the license aspect, 150 financial closings were approved, and over 400 PV technology electricity production licenses with were granted.



Looking to the future, the electricity sector, with the Electricity Authority in its center, is facing a new and challenging area, with the massive entrance of private electricity production (approx. 30% in the upcoming years), the expected creation of a competitive market, extreme changes in the environment policy and an expected reform in the IEC. All of the above mentioned are expected to create many different challenges, which require the expansion and completion of a complex and comprehensive regulation.

The premise, supported by the economic literature and international institutes, including the OECD organization, is that a worthy, quality regulation contributes to the stability of the electricity market, and is an important tool in the general economic growth of the market. It should be mentioned that the Authority places great importance on maintaining comprehensive public transparency, and accordingly publishes all of its resolutions in the official gazette, the media and the Authority's website.





The Authority's Chairwoman, attorney Orit Farkash- HaCohen, declared that the strategic goals for next year are: increasing the regulatory certainty in the sector, preventing market power exploitation by entrepreneurs and players in the electricity sector, strengthening the status of electricity consumers, regulating the sector's activities and regulating the sector's supervision, alongside the need for affective supervision. The Authority intends to continue consolidating and implementing supervision strategies and examine active enforcement methods in order to increase regulatory certainty. For this purpose the Authority is working on a variety of steps, starting with the series of reporting rules required from the monopoly in the field, through defining tariffs and criteria for the regular activity of private electricity suppliers and a consumer reform in the electricity bills, making them more accessible to consumers while constantly minimizing costs for the electricity consumers.

Promoting renewables Implementing government decisions

setting tariffs

\* eliminating lines – handling 700 licenses 150 financial closings preparing the rastructure for the grid parity area anting hundreds of PV enses approved by the

The Electricity Authority has the authority to determine the payments paid under the electricity tariffs to suppliers producing clean energy electricity. Hence, the Authority consolidated a regulative infrastructure for electricity production using various clean production technologies, published a series of tariff regulations and granted licenses approved by the minister for the production of green energy electricity, including photovoltaic energy, wind energy, biogas energy and biomass energy, in a scope of 20% of the electricity production in Israel until 2020:

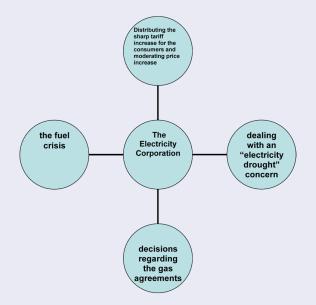
- Setting the tariffs required for the entrance of clean energy for all renewable energies (photovoltaic, wind, biogas, biomass and more) - 19 decisions (see appendix I - the Assembly's decisions - renewable energies).
- Granting over 400 PV technology electricity production licenses, approved by the Minister of Energy and Water Resources (see appendix I - the Assembly's decisions - licenses,).
- Approving 150 financial closings of projects in the field of renewable energy (see appendix 8 concentration of tariff permits,).
- Simultaneously, a significant tariff reduction had been made, which resulted in a cumulative 6 billion NIS saved for the consumers (in cooperation with the



Israel Land Authority) (see appendix I - the Assembly's decisions - regulations and tariffs, renewable energy).

- Preparing the infrastructure for clean energy electricity production with grid parity prices (for example, a net metering arrangement which allows each citizen to minimize their electricity expanses using a private production facility in their home, using renewable energy, thus saving on electricity payments. The new arrangement, which is simple and easy to use, will lead to renewable energy electricity production and incorporating private consumers in the Israeli electricity sector. (Authority decision no. 10, meeting 389, 25.12.2012) (See appendix I the Assembly's decisions regulations and tariffs, renewable energy).
- The "no more lines" project (handling over 700 requests for clean PV electricity production licenses over the course of several months) (see appendix 6 the PV technology conditional licenses in the distribution grid table).

#### - Activities with the Electric Corporation - the fuel crisis in the electricity sector:



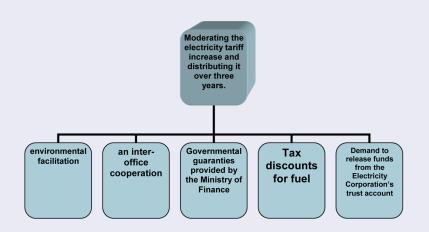
The halt in the Egyptian natural gas supply to the Israeli sector and the ongoing dwindling of the gas flow from Israel's natural gas reservoir (the Tethys Ocean) in the past two years have resulted in a realistic need to raise the tariffs by over 40%. The Electricity Authority has led an all-government coordinated move to moderate the tariff increase rate and distributed the tariff increase across three years, in order to facilitate electricity consumers.

In light of the natural gas shortage that resulted from the Egyptian changes and the dwindling of the Tethys ocean reservoir, the Authority was required to make a series of unusual decisions in order to enable the sector's normal operation:

 A summer shortage concern - "electricity drought" - creating a series of 16 consumers and producers arrangements in order to decrease electricity demands (see appendix I - the Assembly's decisions - the Electricity Corporation).



- Creating a series of decisions for the prevention of a natural gas monopoly in a reality of Israeli discoveries (see appendix I - the Assembly's decisions - the Electricity Corporation).
- Promoting, inserting and creating a market for private electricity suppliers (see appendix I the Assembly's decisions private electricity suppliers).
- Tariff increase due to the gas crisis: (see appendix I decisions regarding tariff updates - essential service providers).



- after dozens of years of a complete electricity monopoly by the Israel Electric Corporation, this area marks the maturity of the Authority's actions towards laying the foundation for the creation of the right conditions for competition and incorporating private electricity providers into the sector in a significant rate of approx. 30% of the electricity production ability in Israel over the next few years (see appendix I the Electricity Authority's decisions private electricity suppliers, P. 52-65).
- Overseeing and approving big private electricity suppliers' financial closings, Dalia being the most recent.

#### - intervening in the gas agreements:

In an unprecedented move, and as part of its activities in shaping the future electricity sector, the Electricity Authority examined the gas agreements that the Israeli gas monopoly, Tamar, has signed with the electricity Corporation and with private suppliers, fearing that the gas supplier is exploiting the market power, which will result in an unreasonable tariff raise for the electricity consumers. The electricity Authority conditioned the recognition of the costs agreements, coordinated with the Commissioner for Restrictive Trade Practices, by performing a series of changes in the gas agreements between the Tamar partnership and the Electricity Corporation and private suppliers. These changes are expected to bring a return of at least 1 billion dollars to the electricity consumers.

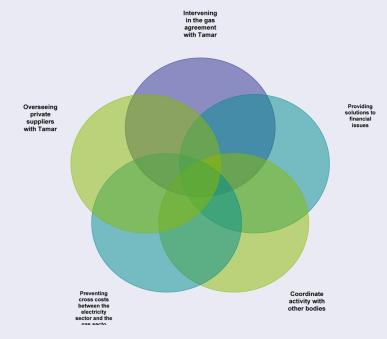
The Authority's intervention maintained the consumer's interest for a reasonable cost, rejected various raises in the agreements and cleared gas quantities for the benefit of new future gas suppliers in order to prevent the gas monopoly.



• The Authority's decision regarding the gas agreement with Tamar partnership (decision no.1, meeting 337, 14.06.2012, "principles for recognizing costs based on natural gas procurements agreements") (in cooperation with the Anti-Trust Authority) (see appendix I - the Electricity Authority's decisions - private electricity suppliers).

• The Authority's decisions regarding the prevention of cross costs between the electricity sector and the gas sector (decision no. 1, meeting 377, 14.06.2012, decision no. 2, meeting 338, 06.06.2011, decision no. 3, meeting 386, 05.11.2012) (see appendix I - the Electricity Authority's decisions - decisions regarding natural gas in the electricity sector).

• Individual overseeing of all electricity suppliers with the gas monopoly, regarding natural gas agreements and, accordingly, the Authority's decisions (see appendix I - the Authority's decisions).



-Fear of an electricity shortage - "electricity drought" and consumer arrangements:





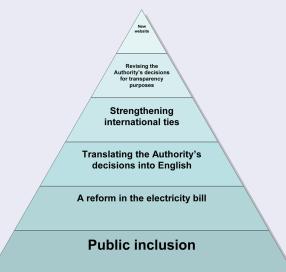
An actual fear of an electricity shortage occurred in the summer of 2012. In light of this, the Authority has worked towards creating and expanding approx. 16 shortage management arrangements, both for entrepreneurs and consumers, which encourage electricity saving and utilizing the electricity production possibilities.

In the months leading to the summer of 2012, the Authority strengthened the arrangements for encouraging consumption shifting and determined the first agreements for electricity savings for the consumer (see appendix I - the Authority's decisions - the Electricity Corporation) alongside coordinated work with an interoffice government team in the Ministry of Energy and Water Resources, which included various government representatives:

- "Conserve and save" (20/20)
- Simple TOU an arrangement that allows consumers to save on electricity consumption, according to the time of use tariff (Authority decision no. 1, meeting 361, 30.01.2012).
- Smart consumerism (consumers' associations) (for more detail see clause "private electricity distributers and suppliers).
- Generators arrangements.
- Rolling peak.
- Expanding mandatory TOU.
- A voluntary shedding arrangement.
- An unusual economic regulation for incorporating private electricity suppliers in the absence of gas to operate with the system's manager.
- Renewable energy arrangements

Strategic projects currently executed:

- A strategic move and consolidating the policy and vision of the Authority's activities the Authority is in the midst of a strategic move towards an efficient, comprehensive and affective development of the current activity. This move will continue through 2013 and will include: consolidating comprehensive work procedures, human resources requirements, consolidating the vision and the operational steps for implementing the organization's structure and activity.
- Public inclusion and transparency:





The philosophy behind the regulator's job is a simple one: the regulator makes decisions and passes them in a comprehensive and transparent manner to the general public, in order to receive a response that can fertilize the decision making progress.

The Authority's decisions are subjected to a public hearing and published for the general public to see, in order to receive a response. The Authority maintains transparency towards the consumers and the entrepreneurs, and provides daily updates of the license data.

In addition, the Authority promotes a series of steps intended to improve the transparency and the public's information flow:

- A reform in the electricity bill a complete explanation regarding electricity costs in the electricity bill for the benefit of the public (see appendix I the assembly's decisions the Electricity Corporation, P. 52-65).
- A new website the Authority places great importance on increasing the activism of the electricity consumers and suppliers, sharing information with the public, making it more accessible and completely transparent.
- A revision project for the Authority's decisions a comprehensive work that will organize and combine all of the revised Authority's decisions in a way that will make finding historic decisions and implementing the recent changes in the decisions easier.
- Strengthening the Authority's ties with international regulatory bodies the Authority has been strengthening its ties with European regulatory organizations in order to increase cooperation and coordination and institutionalize regulations that match the OECD's principles. In addition, the Authority has also joined, as an active member, a task force on behalf of the regional regulatory organization for the improvement of consumer's rights. As a result, the Authority also hosted delegations from Greece and Cyprus.
- Translating the decisions into English the Israeli electricity sector has undergone a significant change regarding the sector's financing aspect and the companies that operate in it, while international companies in various fields have been massively integrated into it. In order to create the right market conditions, the Authority is working towards translating the fundamental keys of the Israeli regulations into English.
- <u>Private electricity suppliers and distributers:</u>
- The "historic electricity distributers" activity was regulated in 2009 by the Electricity Authority in its decision from meeting no. 272, and approved by the high court of justice, which stated that anyone performing historic electricity activities is considered an essential service provider obligated by service and tariffs obligations, as they are defined for other essential service providers.

In addition, the Authority determined that the electricity distributer must regulate its historic activity regarding the relevant distribution area, maintaining safety instructions as required by law, etc.



The electricity distributor is required to decide if it will continue its activities as a historic distributor or rather transfer the distribution activities after holding a lawful license, as long as he submits a notification to the Authority's licensing department regarding entering the activity regulation layout. Once a distributor received the layout approval, he is eligible to receive a concentrated selling tariff, which is a cheaper tariff that recognizes the electricity distribution costs saved for the Electricity Corporation and is now the responsibility of the distributer at a defined geographical region.

The decision regulating the economic arrangement regarding changing distribution areas between outgoing electricity distributers and incoming electricity distributer will be published soon.

• Distribution license and supply license for Pituah She'an - (decision no. 2, meeting 378, 25.06.2012).

• An aggregator consumer - the "smart consumerism" arrangement is a voluntary consumerism arrangement. Consumers with a continuous meter can choose whether to join a direct engagement arrangement with the Electricity Corporation or rather join via an "aggregator consumer" with a trade license. Consumers who do not have a continuous meter (including home consumers who until now did not belong to any arrangement) can join an agreement only through an "aggregator consumer". The "aggregator consumer" is a licensed corporation, obligated by the Electric Corporation to reduce consumption during the tough hours, in exchange for an incentive determined by the Authority. In order to uphold this obligation, the "aggregator consumer" signs a separate, parallel trading agreement with every consumer for consumption reduction.





# II. Report - principle issues on the Electricity Authority's agenda during 2011-2012

#### 1. The Electricity Authority's activities with the Electric Corporation

1. The gas crisis in the electricity sector and distributing the electricity tariff: Unlike the year 2010, which signified a year of declarations regarding finding natural gas reservoirs in quantities which will most likely release Israel from its dependency on imported gas and even turn Israel into a natural gas exporter, 2011-2012 signified a natural gas shortage due to the geopolitical implications of the "Arab Spring" revolutions in Egypt and the discontinuation of the gas flow following five different explosions, until the Egyptian government's official announcement regarding a one sided cancelation of the agreement. The accelerated dwindling of the Tethys Ocean reservoir and the global price increase of alternative fuels also contributed to this trend. These events resulted in a direct implication on the electricity tariff, which increased on several occasions:

- March 2012 8.9% increase
- August 2011 9.89% increase
- October 2011 4.5% increase

In light of the harsh data, at the end of 2011, the Authority initiated a coordinated general governmental move that resulted in the March 2012 decision to distribute the required raise of about 40% over three years, with the March 2012 raise being only 8.9%.

The reduction was made possible by the devotion of the governmental offices, including the Minister of Finance's agreement to increase the 2011 excise tax discount for solar from 69% to 88% and the modifications made to the widthwise order by the Ministry of Environmental Protection. All of this occurred while defining a joint governmental layout with the Electricity Corporation, which included the company's reorganization and releasing funds from the trust account for the benefit of the Electricity Corporation's employees which consists of benefit related elements and not pension related elements. It should be mentioned that these two unusual years of tariff increases arrived after a series of decreases made by the Authority in the last two years, which brought an accumulated price reduction of 12.5% of the electricity tariffs.

Even after the tariff was raised, in actuality it remained lower by 6.8% compared to the July 2008 tariff. The unusual move by the Authority of updating the electricity tariff using a triennial mechanism, while distributing the gas cost in the mechanism, enabled the restraint of raising the tariff to the public, emphasizing a solution for the electricity company's cash flow distress. This was not a simple move, but yet a necessary one, due to the unusual situation of a natural gas shortage and additional fuel costs the Israeli economy faced. Simultaneously, the Authority has been working at creating consumption arrangements for the consumers, which will relieve the burden for the consumers in light of the expected tariff increase.



#### Changes in the real\ linked tariff April 2012 - Agorot\KWh



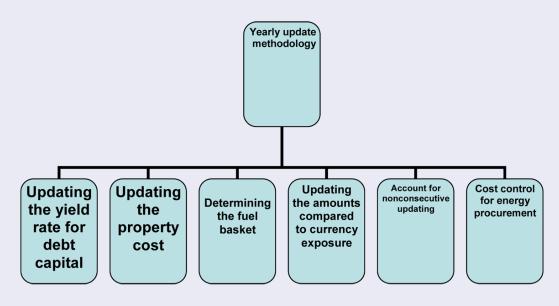
The Electricity Authority is closely monitoring the natural gas supply, both from the Egyptian gas supplier and the Israeli one. For that purpose, it has been operating a dynamic tariff mechanism during 2011-2012, according to the changes in the natural gas supply, and will continue operating it as long as there is uncertainty surrounding the gas supply.

This dynamic tariff mechanism internalizes the frequent changes in the natural gas supply to the Electricity Corporation and the change in the company's gas basket (including increased solar production).

The three price increase pulses, which are considered moderate compared to the required one time increase, were backed up by the abovementioned governmental activity.

Yearly updates:

The Authority's methodology for determining the yearly updates:





The yearly update is a complicated project with a series of updates of the cost components, which are updated according to the rules determined by the Authority, the conditions requiring changes being made before the end of the test period (the tariff period) and changes in the economic index. The update includes the following components, among others:

- Determining the fuel basket recognized for the company for the previous year.
- Determining the temporary fuel basket recognized for the company for the next year.
- Updating the cost of new assets operated in the previous year and providing a forecast for the asset costs operated in the upcoming year.
- Updating the yield rates for debt capital.
- Updating the hedged amounts compared to the currency exposure.
- Account for nonconsecutive updates of the tariff and account for past amounts recognized by the Authority.
- Cost control and account for energy procurement in the various Authority regulations, including private electricity suppliers, renewable energy, shortage management arrangements and other arrangements.

#### Current tariff update

The economy department examines the change in the recognized costs for the Electric Corporation twice a month. On 24.10.2011, the Authority decided on the current update of the electricity tariffs, after the change in the recognized costs passed the threshold of the tariff update. The tariffs were updated at an average rate of 4.72%, and the main factors of the change were: the fuel prices of approx. 3.5%, the rate of exchange- index hedging exposure, approx. 0.6% and a dynamic update of the fuel mix as a result of obstructions in gas supply approx. 0.6%.

Current update of the sale tariffs for the East Jerusalem Electric Company's consumers

The update was done due to significant changes in the cost of fuel recognized for the Israel Electric Corporation and the peak hour's group update in 2010, which affect the East Jerusalem Electric Company electricity procurement cost (the decision in the matter was made on 29.8.2011, meeting 347).

Distributing the Electric Corporation's debt to the consumers

The Electricity Authority decided to distribute the company's debt, in the sum of 2 billion NIS, until the end of 2025. This debt is mostly due to an over-collection which began in 2009, due to the fuel basket. Distributing this debt is an unusual move which can lead to distortions in the electricity sector and damage future competition.

The Authority decided to distribute this debt in order to allow the company to build three new steam additions in light of the expected electricity shortage from 2013 onward, and due to the company's tough financial circumstances (meeting 328, 7.3.2011).



Principle recognition in the cost of leasing a gasification vessel

The Authority approves the recognition of the cost of leasing a gasification vessel between the Electricity Corporation and Accelerate Company:

In its decision, the Authority determined that leasing the vessel and using the liquid gas can save the Israeli electricity sector up to two billion NIS during 2013-2014.

In decision no. 1 of the Authority, meeting 339, 20.6.2011, the Authority recognized in principle the cost of leasing a gasification vessel. In decision no. 3 of the Authority, meeting 383, 5.9.2012, the Authority's assembly approved the cost of leasing the gasification vessel from Accelerate Company and the cost of purchasing liquefied natural gas (LNG). Leasing the vessel will allow the use of liquefied natural gas which has replaced the use of more expansive fuels since 2013, as a result of the shortage of natural gas.

With the ongoing dwindling of the Thetis Ocean reservoir and the arrival of the gas from the Tamar reservoir expected during the middle of 2013, the only short term solution for gas supply was using an LNG buoy and a gasification vessel.

The LNG buoy collects natural gas from the liquid fed to it by the vessel which converts liquefied gas to natural gas, which will be leased by the Electric Corporation. This decision completes the decision from 20.6.2011, when the Authority made a principle decision to recognize the cost of leasing the gasification vessel, after cost control and after the financial profitability was determined according to the then known data.

It should be mentioned that the Authority's decision regarding the gasification vessel was accepted under conditions of uncertainty and risks, and the uncertainty regarding the date of the Tamar reservoir gas supply still remains, as well as the uncertainty regarding the alternative fuel prices in the market during the leasing period, as well as operational risks of the new technology of the LNG buoy and loading the gasification vessel using another vessel in the high seas. In addition, the Authority emphasizes that the prices in this arrangements are higher than previously estimated, yet the arrangement still constitutes a huge advantage compared to the alternative fuel- solar, and can result in great savings to the Israeli electricity consumers.

The Authority's examination found that even after the gas starts to flow from the Tamar reservoir, this project can result in significant savings for the sector, seeing as Tamar is not expected to supply all of the natural gas demands and seeing as the liquefied gas prices are significantly lower than the alternatives. The savings can reach 2 billion NIS during 2013-2014.

The Electric Corporation's accountability

The Authority's assembly's subcommittee has prepared a draft of the Electricity Corporation's accountability report, according to its various activity segments. The accountability shall constitute a milestone in the supervision of the company and its data requirements. It worth noting, among other things, that the report includes current report requirements, such as:



the cost of operating the electricity system, sales and marketing expenses, administrative expenses and general expenses, permanent property, intangible assets, etc.

In preparation for the report, a comprehensive review of the reporting principles was performed:

- a. Regulators of various fields in Israel
- b. Infrastructure regulators abroad
- c. Reports of other electricity companies abroad
- d. Studying the internal report array in the Electric Corporation

Supervising the establishment activities in the Electric Corporation's production field This period was also characterized by increasing control and supervision of the Electric Corporation's activities, with representatives of the Authority performing active field supervision of the IEC's activities in these segments.

The supervision of the production power plants' establishments during stage A of the emergency plan was completed. In addition, supervision of the stage B of the emergency plan has begun, while managing a designated account for this purpose.

It should also be mentioned that the money management in this designated account, done by the Authority, will take into consideration the company's financial state, with special Authority decisions made in this regard (see appendix I - the Electricity Authority's decisions - the Electric Corporation).

Determining the basis for the new tariffs for the transmission and distribution segments and hiring international consultants.

In 2010 the Authority began the process of determining the tariff basis for the transmission and distribution segments. The company was required to submit reports to the Authority. The data was analyzed and due to credibility problems found in them, the Authority reached the decision that the company's data could not serve as the basis for determining the tariffs, and for that reason the Authority initiated a tender for an international consulting company which will base the tariffs on the existing knowledge accumulated abroad. In addition, the Authority determined that:

- a. The new tariff will be applied retroactively starting from April of 2012.
- b. A 240 million NIS deposit has been given.
- c. The yearly reorganization required from the company has been frozen.

Monitoring the company's financial reports

The Authority is closely monitoring the company's financial reports. In the beginning of 2011, the accounting standards (FAS90 and IAS36) were implemented, and under certain conditions they require provision for the decrease in value.

The Authority prepared its opinion, which states that the calculations should be performed in such a way that will ensure that the company is one cash producing unit and not three cash producing units, as was previously suggested, which would have resulted in a loss of approx. 500 million NIS to the company's books.



## 2. A gas monopoly consolidation in a world of Israeli discoveries - intervening in gas agreements

#### 1. Decision no. 1 of the Authority, meeting 377, 14.6.2012 - intervening in gas agreements

The Authority has invested extensive efforts into examining the gas agreements signed between the Israeli gas monopoly Tamar and the Electric Corporation and private suppliers, in a manner that could have resulted in the exploitation of the market power by the gas suppliers which could have cause an unreasonable tariff increase for the electricity consumers.

In an unusual act of intervention, after a comprehensive examination which lasted several months, the Authority determined that the current gas agreements impose excessive costs on the electricity consumers and perpetuate a gas monopoly which will prevent minimizing the tariff cost for the consumers.

According to the examination, the Authority instructed a series of changes in the gas agreements between Tamar and the IEC and the private consumers which will result in a return of a billion dollars to the electricity consumers.

This intervention maintained the interest of the consumers for a reasonable cost and the prevention of a monopoly over dozens of years and the discontinuation of the gas flow as soon as possible - for the benefit of the entire energy sector.

The Authority has performed lengthy debates and a series of decisions in the matter, which has become essential in the Israeli sector, which is the creation of an Israeli gas supplier monopoly in the electricity sector.

Thus, the Authority instructed a series of changes in the gas agreements between Tamar and the IEC and private consumers. The Authority estimates that these changes resulted in a 1 billion dollars return to the electricity consumers, due to the elimination of excessive costs and the creation of the right conditions for the entrance of another gas supplier.

These changes were accepted and assimilated by the IEC and they constitute a milestone in the company's activities with the gas supplier.

The Authority's decision was determined after a comprehensive public hearing, a series of intense discussions in the Authority's assembly meetings, including an oral hearing to the commercial and consumer bodies.

In its principle decision, the Authority determined that fundamental changes must be made to the terms of the agreement, which were signed for the next 15 years, between Tamar gas supplier (which is owned, among others, by the Delek Company and the Noble Energy Company) and the IEC and private suppliers. The Authority announced that it will not permit issuing all of the costs to the consumers, and stipulated its recognition of the costs



of the natural gas agreements for the electricity sector by making fundamental changes in the agreements.

The changes determined by the Authority ensured the needs of the sector, the entrance of private electricity suppliers and maintaining the interest of the consumers for minimizing long term costs.

The Authority's decision was accepted under complicated circumstances, in a lacking regulatory environment, at a time of a natural gas shortage and a national urgency to prevent a delay in the supply renewal, with the entrance of the private electricity entrepreneurship into the electricity sector, in a reality of a single natural gas supplier and during an electricity shortage concern derived, among others, from the gas and electricity reserve shortage.

The Authority's decision promotes the long term benefits of the electricity consumers, and ensures the immediate entrance of the private electricity consumers into the electricity sector after many years. The Authority also considered the consumers' long term interests in order to keep available gas amounts free for another gas supplier in order to prevent the creation of a long term market failure in the form of an electricity monopoly opposite a natural gas monopoly.

#### The main aspects of the authority's decisions:

Regarding the IEC - Tamar agreement:

- a. The Authority refused to recognize the consumers' electricity tariff for excessive costs derived from the agreement between the IEC and Tamar and is canceling the linkage mechanism in the agreement which increases, artificially, by one percent every year, during the first eight years of the agreement.
- b. The Authority has stated that these increases are not justified and their purpose is to artificially increase the electricity and gas tariffs in Israel in the next few years in a manner that will significantly harm electricity consumers.
- c. The Authority demanded that this amount will be returned to the consumers by changing the future transaction of the IEC and drastically reducing it through linking it with a minimal rate of only thirty percent to the American index (instead of a complete linkage, as determined in the original agreement, with an increase of one percent over the first eight years).
- d. The Authority's conditions have created a gas transaction parallel to the IEC's basic transaction with low competitive prices, and are the reference point for the price openings and future gas transactions.
- e. The Authority has further determined that players in the electricity sector will receive a financial incentive for each future price lowering of the existing gas transactions.
- f. In addition, the Authority determined that the arrangements regarding the IEC's exit point (option) will change in a manner that will allow the IEC to exit the agreement on two separate dates, determined by the Authority, instead of only one date, thus, ensuring the entrance ability of another gas supplier from whom available amounts will be purchased by the company, ensuring the prevention of the Tamar monopoly.
- g. Regarding the private electricity production agreements, the Authority stipulated



the agreement cost approval on making many fundamental changes.

- h. These changes include a dramatic decrease of up to 50 percent of the agreement amounts in order to make room for another gas supplier in a manner that will lead to competition which will lower the gas prices which will be transferred over to the electricity tariff, compared to the existing agreements which perpetuate the Tamar monopoly and prevent the entrance of more gas suppliers during the period of the agreement.
- i. In addition, the decision includes a refusal to include the producer's obligation to only purchase gas from the Tamar monopoly.
- j. The comprehensive arrangement, with the consultation of the Restraint of Trade Controller, includes the suppliers' rights, which were prevented under the current agreements, to sell excess gas to industrial consumers and different plants which are important to the Israeli industry and economy, and who are suffering from the gas shortage and the difficulties signing financial procurement agreements with Tamar.
- k. Regarding the lack of capacity problem the Authority mentioned that it places great importance on the governmental authorities, who are trusted with the task of dealing with this problem, providing a solution to the problem, as well as the urgent need to incorporate private entrepreneurship, which is currently without gas due to the cancelation of the gas agreement with Egypt. Should the gas supplier fail to provide a solution to the expected entrance of these entrepreneurs, the Authority will consider using its authority and contact more government authorities in order to start this move.
- I. The Authority emphasized that the creation of the conditions for future competition and preventing the perpetuation of the natural gas monopoly alongside an electricity monopoly, are the optimal tools for minimizing the long term costs for the electricity consumers.

Benefits for the consumers:

- m. The Authority's decision is highly beneficial to the consumers:
- Preventing a future situation in which electricity consumers will be captivated by an electricity monopoly and a gas monopoly.
- The decision creates certainty in the upcoming natural gas supply renewal whose cost and pollution is significantly lower and expresses the public's interest, especially regarding other alternative fuels which are currently used for electricity production and will be affected from the tariff increase in the recent period.
- The decision maintains the benefits of the basic transaction to the electricity consumers, while maintaining an energetic security for the Israeli consumers by an essential service provider.
- The consumers are expected to enjoy private entrepreneurs entering the electricity production field, after dozens of years of a complete monopoly in the field, thus changing the electricity production sector in Israeli over the next two years to include almost 30 percent private electricity production.
- The decision creates the right conditions for making available gas amounts for another gas supplier to enter the Israeli sector for the benefit of the consumers.
  The decision entails working with the Restraint of Trade Authority, providing



solutions to various industries and plants, which are currently suffering a natural gas shortage which results in economic losses and the dismissal of many employees.

The state of the natural gas sector over the last two years should also be mentioned. Thos sector relied on one local gas supplier (the Thetis Ocean) ,which is continuously dwindling, and is in a complete halt in the gas supply from Egypt, along with the cancelation of the natural gas supply agreement between Egypt and Israel. Currently, the Tamar reservoir is the only one expected to supply gas in significant scopes to the sector, but only from the second half of 2013. The reservoir is owned by fuel partnerships, Isramco partnership, Avner, Dor Alon and Noble Energy, which is also the reservoir's operator.

At the end of its decision, the Authority emphasized that it stipulates its recommendations on the condition that the gas supplier will comply with the terms of the decision without worsening the rest of the agreement's terms. It should be mentioned that this decision was made with the government's cooperation.

 Expanding the Authority's activity in the costs of the natural gas procurement agreements for the benefit of the electricity sector (decision no. 3, meeting 386, 5.11.2012 - updating decision no. 1, meeting 377, 14.6.2012).

The Authority has examined the implications of its decision, and on November 2012 it published a complementary decision to its former one. According to this decision, and in light of the last gas drilling failures and the concerns that Tamar gas supplier is exploiting its monopoly status, the Authority has announced that it will not recognize the IEC's costs in the next gas transaction, which reflect a higher gas price than that determined. In addition, a new set of principles was determined, according to which the Authority will recognize the costs of the natural gas procurement agreements for the electricity sector's needs.

In addition, the Authority refused to recognize the expensive gas prices charged by Tamar for interruptible gas supply to the suppliers.

The decision is mostly centered on two major aspects:

First - the Authority has determined a maximum price for the IEC's upcoming gas transaction, which can replace some or all of the company's option transaction with Tamar, should it occur with another gas supplier, for example, Leviathan. This price was derived from the principle decision made by the Authority several months ago, in coordination with the Restraint of Trade Authority.

Prior to the consolidation of the following agreements on behalf of the IEC, the Authority determined that it will not charge consumers with prices higher than the option transaction, even with another gas supplier who is not Tamar or Leviathan, since it views the next transaction as one that will essentially replace or expedite the option transaction. The second aspect of the decision regards the recognition of gas prices by the Authority to private electricity suppliers. After the Authority received information regarding various



electricity suppliers signing gas agreements for interruptible supply, mostly due to the Tamar's limited gas pipe capacity.

The gas supply a supplier with an interruptible agreement receives is an accepted practice in most countries that use natural gas for electricity and industry. Clearly, it is significantly inferior to that of a supplier with a guaranteed gas supply. Moreover, the accepted practice around the world for interruptible gas supply transactions is that the determined gas price is always lower than that of a guaranteed gas supply.

Despite this, several interruptible gas supply agreements between private electricity suppliers were submitted for the Authority's approval. Despite entailing a lower quality of service due to the interruptible supply, these agreements did not entail reduced prices during interruptible supply periods, as is accepted around the world and as common logic dictates. Therefore, the Authority has ruled that it will not recognize these non reduced costs and determined a reduced recognition as is specified in the decision. The Authority also believes that a failure to correct these agreements according to its decision raises the concern that the gas supplier will exploit its monopoly status.

In light of the above, the Authority has determined that an interruptible gas supply transaction, which can reach up to a 1000 hours a year, shall have a lower gas price by at least 10%, compared to a guaranteed gas supply transaction.

The Authority also mentioned that it views a failure to correct the abovementioned agreements as an exploitation of Tamar's market power,

The decision also includes a technical part of updating the content of the Authority's decision regarding gas agreements. During the time period after the Authority's decision (decision no. 1, meeting 377, 14.6.2012); the Authority found out that permanent license holders suppliers signed the gas agreements for the guaranteed supply, without informing the Authority. In light of this, the Authority allows these license holders to receive the relevant gas price and tariff decided upon in meeting 377, should they achieve financial closing or meet the terms of a financial closing, no later than 90 days from the abovementioned decision. The Authority shall not recognize the general linkage formula of the production component.



#### 3. Promoting renewable technologies electricity suppliers

1. <u>Promoting renewable energy electricity production and implementing the</u> government's decisions

According to the government's decisions no. 4450 and 3484, the Authority has been working in recent years towards regulating renewable energy facilities in the following scopes and costs to the electricity sector (the regulations published during 2011-2012 are marked):

Type of tech- nology	Regulated dur- ing 2011-2012	Total amount of production allocated by the Authority	Yearly sector cost for electric- ity consumers (in million NIS)	Yearly affect on the electricity consumers in the consumer's tariff (another percent to the tariff)
Small PV	110 MW regu- lated in 2012	310 MW	559 million	2.8%
Medium PV*		300 MW	360 million	1.8%
PV Land ten- ders	120 MW regu- lated in 2011	120 MW	42 million	0.3%
Large PV	200 MW regu- lated in 2011	200 MW	88 million	0.6%
Thermo solar	200 MW regu- lated in 2011	200 MW	251 million	1.3%
Wind	800 MW regu- lated in 2011	830 MW	460.8 million	2.3%
Biogas **		210 MW	302.4 million	1.2%
Ashalim ten- der - thermo solar		240 MW	297 million	1.7%
Haluts facili- ties ***		50 MW	Currently un- known	Currently unknown
Net metering	400 MW regu- lated in 2012	400 MW	0	0%
Total	1990 MW: 1480 MW in 2011 510 MW in 2012	2860 MW	2.36 billion NIS	12%

\*including tariff reduction according to the published hearing on the matter, a final decision has yet to be made.



\*\*160 MW have been regulated, another 50 MW are currently being regulated, and a call for proposal has been issued to entrepreneurs in collaborations with the Ministry of Environmental Protection.

\*\*\*the final decision has not been published yet and thus there still isn't an excessive cost estimation for the regulation electricity sector.

The table shows that a total of 1,990 MW have been regulated during 2011-2012 (70% of all regulations for renewable energy in Israel), with 1,480 MW of them during 2011 (large PV, thermo solar, land tenders, wind and biogas) and 510 MW of them during 2012 (small PV and net metering).

During 2013, the Authority is due to complete the regulation for energy production from waste (50 MW) in cooperation with the Ministry of Environmental Protection, as well as publish the final draft of the Haluts facilities regulation. In doing so, the Authority will have completed its obligations according to government decision no. 3484 from July 2011 to regulate the quotas included in this decision.

#### 2. Reducing tariffs and minimizing the costs for the electricity sector for 2011-2012

Under the Authority's jurisdiction, according to the Electricity Sector Law - 1996 and the rest of its lawful authority, the Authority sets the standards and tariffs for private suppliers according to the various technologies. The principle guiding the Authority in determining the various regulations is minimizing the costs paid by the consumers while maintaining the proper balances in order to develop the electricity sector and create certainty for the entrepreneurs operating in this field.

A series of government decisions, starting from 2009 and onward (4450, 3484, etc.) determined and ratified Israel's commitment to producing energy from renewable sources. The goal set in this field for the year 2020 is 10% of the electricity production and the guiding intermediate goal for 2014 is 5%.

The Authority responded in a series of regulations intended to meet this goal. Simultaneously, at any stage where the advancement of technology and other relevant information created cost reductions which resulted in a gap between the tariff and the cost of establishing the facilities - the Authority worked towards updating the tariff.

This reached its peak during 2010-2012, with a worldwide decrease of approx. 60-70% of the costs of solar photovoltaic facilities and equipment. In light if this, the Authority has lowered the paid tariffs for electricity produced from photovoltaic facilities connected to the distribution grid, from 1.44 NIS for produced KWh, to 0.96 NIS for KWh at the end of 2011. During the end of 2012, the Authority also made a series of decisions for more tariff reductions for facilities in the transmission and distribution grid (including land tenders by the Israel Land Authority) to 0.49 - 0.61 NIS per KWh. With these moves, Israel joined the world trend of reducing the feeding tariffs to PV facilities.



The following table summarizes the tariff reductions during 2011-2012:

#### <u>PV tariffs updates - the Electricity Authority 2011-2012</u>

Regulation	Size of affected quota	Old tariff	Tariff after reduction	The outcomes of the move
PV distribution grid (12/2011)	300 MW	144 agorot per KWh	96.3 agorot per KWh (-33%)	The quota was taken within two months
PV transmission grid (10/2012)	200 MW	98 agorot per KWh	61 agorot per KWh (-38%)	The quota was taken within three months from the time of the decision
PV land tenders distribu- tion (10/2012)	44 MW	102.5 agorot per KWh	49 agorot per KWh (-53%)	The regulation is be- ing implemented as planned
PV land tenders trans- mission (12/2012)	60 MW	102.5 agorot per KWh	53 agorot per KWh (-49%)	The regulation is be- ing implemented as planned
Business PV for summer of 2012 (quota advance- ment) (06/2012)	30 MW	90 agorot per KWh	65 agorot per KWh (-28%)	The quota was im- mediately taken
Home and business PV for 2013 (12/2012)	30 MW	65 agorot per KWh	45-58 ago- rot per KWh (-17%)	IEC sanctions
PV distribution grid** (02/2013)	61 MW	96.3 agorot per KWh	57.2 agorot per KWh (-40%)	Public hearing, has yet to be completed

\*After linkage

\*\*Public hearing, a decision has not yet been made



Tariff updates save the consumers: 6 billion NIS - non capitalized, 3.5 billion NIS - capitalized

Country	Tariff (agorot per KWh)	Last update	Reduction during the last year
Philippines	93 agorot	July 2012	46%
Germany	57 agorot	February 2013	44%
Bulgaria	60 agorot	June 2012	51%
Britain	45 agorot	May 2012	16%
Italy	56 agorot	July 2012	43%
Slovakia	59 agorot	July 2012	54%
California	45-49 agorot	May 2012	
Taiwan	70-78 agorot	2013	23%-18%
Greece	136 agorot	August 2012	23%
Israel (regulations)	57-61 agorot	December 2012	40%-38%
Israel (land tenders in the distribution grid)	49 agorot	October 2012	52%

The following table shows a comparison between the feeding tariffs in Israel and the rest of the world:

The electricity sector saved a total of approx. 3.5 billion NIS in capitalized values and approx. 6 billion NIS in non capitalized values spread across 20 years - as a result of the Authority's moves.

In addition to the tariff reduction, the Authority began <u>linking the feeding tariffs to the</u> <u>linkage formula with a series of measures</u>: rate of exchange, interest rates, consumer price index and the international index of the BNEF company (hereinafter: "Blumberg") for equipment and PV solar facilities.

The rational guiding the Authority in linking the tariffs is a double one:

- Creating certainty for entrepreneurship regarding the expected feeding tariff unlike the random, one time tariff updates, which are characterized by external pressure and uncertainty, linking the tariff to external measures creates an automatic update downwards or upwards, according to the changes in the relevant measures that determine the projects' costs, thus minimizing the risks and increasing uncertainty.
- Preventing a solar "bubble" the absence of a fast and efficient update mechanism for the feeding tariffs has created unwanted phenomena around the world (the most famous ones are: Spain and the Czech Republic, and lately also Japan as well as other countries) of over- subsidizing, resulting in a market "explosion", an "inflation" of various cost components in the value chain (for example - the price of debt capital, land cost, EPC prices, maintenance costs, etc.) and the final result is an inefficient market, high prices

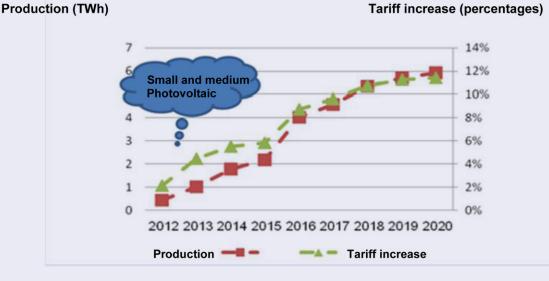


and an unstable regulation that can lead to an essential damage to the field. Some of the countries began implementing retroactive taxes on the existing power stations, which constitutes a harsh blow to the entrepreneurship once the investment in the project has been made. Israel has also began developing this type of "bubble", but the tariff adjustments made during 2011-2012 and the linkage to external indexes has slowed down this process and allowed the market to converge into economic regulations, such as the "net metering" (see clause 5) and the expected regulations based on the Kandel Committee Report (clause 6).

Despite the moves towards reducing the excessive costs by integrating renewable energies, the Authority estimates that in the current layout of the government's goals, the electricity tariffs for the consumers will increase by approx. 11.8%, according to the scope of renewable energy production, in the following rate:

The development of the electricity tariffs following the penetration of clean energy production:

A tariff increase compared to the scope of renewable energy production



30



#### 3. Forecast for meeting the governments' goals for 2014 and 2020 in the existing layout

Implementing the government's goals for 2014 and 2020 is expected to occur using a production scope of approx. 3 TWh during 2014 and 6 TWh during 2020. The Authority believes that according to the existing quotas and regulations layout, the goal will be approx. 80% completed by 2014, and 93% completed by 2020, as follows:

	Total quota	Expected installations 2014 Expected installations 2020				
Type of tech- nology		Installed (power (MW	Annual produc- tion ((TWh	Installed power ((MW	Annual produc- (tion (TWh	
Small PV	310	310	0.54	310	0.54	
Medium PV	300	300	0.53	300	0.53	
Medium PV - land tender	60	15	0.03	60	0.11	
Large PV	200	200	0.35	200	0.35	
Large PV - land tender	60	0	-	60	0.11	
Net metering	400	200	0.35	400	0.70	
Thermo solar	200	0	-	200	0.38	
Wind	830	50	0.12	450	1.04	
Biogas	160	35	0.23	70	0.46	
Biomass	50	0	-	50	0.33	
Haluts facilities	50	10	0.02	50	0.09	
PV "Ashalim" tender	30	30	0.05	30	0.05	
Ashalim" tender" - thermo solar	240	0	-	240	0.72	
Existing facilities	38	38	0.2	38	0.2	
Total supply\ production	2928	988	2.4	2458	5.6	
Total required supply\ produc- tion			3.0		6.0	
Meeting the gov- ernment's goals ((percentages			80%		93%	

According to the installation forecast, there is a gap of approx. 0.6 TWh in 2014, and a



0.4 TWh gap in 2020, in regard to the government's goals and according to the policy document of the Ministry of Energy and Water Resources.

It should be mentioned that without the "net metering" regulation (see clause 5) recently published by the Authority, the government's goal would have been achieved at a rate of only 68% and 81% percent. This regulation, which does not produce cost for the electricity consumers, significantly advances meeting the government's goals, in light of the relatively slow implementation of other technologies, such as wind, biogas and thermo solar.

#### 4. <u>Granting licenses to renewable energy electricity production facilities during 2011-2012</u>

During 2012, the Authority examined and granted licenses and financial closing permits for entrepreneurs in the field of PV facilities connected to the distribution grid. The Authority's forecast is that by 2013, approx. 200 MW out of the existing quota in this regulation will be connected.

Led by the authority's chairwoman, the Authority's professional team executed the "no more lines" project for the examination and handling of over 400 license request submitted to the Authority, and through a quick process that lasted only several months, has brought to the completion of all of these requests.

The Authority's professional team completed examining all 153 financial closings submitted to its approval by the photovoltaic production technology license holders in the medium regulation who hold a conditional tariff licenses.

Out of the 153 projects -136 financial closings were found by the professional team to meet the regulation demands and they were approved and are continuing their work towards establishing the solar facility.

16 financial closings were rejected and examined by a subcommittee through a designated appeal procedure. The subcommittee was appointed by the Authority's assembly and is headed by assembly member Mr. Oren Moshe. The subcommittee approved 4 out of the abovementioned projects, for a total power of 9.5 MW, and rejected the 12 remaining financial closings for a total power of 31.28 MW. One project was canceled at the request of the entrepreneur.

This concluded the examination of the regulated projects, freeing them to move forward into the establishment and operational stages.

The data segmentation regarding the approved financial closings shows the following:

93 low voltage projects with a total power of 47 MW, which constitute 21% of the power;

42 medium voltage projects with a total power of 182 MW, which constitute 79% of the power;



55 projects located in the south, with a total power of 172 MW, which constitute 75% of the power;

26 projects located in the center, with a total power of 16 MW, which constitute 7% of the power;

54 projects located in the north, with a total power of 41 MW, which constitute 18% of the power;

10 projects are located at the Gaza envelope, with a total power of 52 MW, which constitute 23% of the power;

So far, 11 projects, of approx. 10 MW medium facilities, have been connected to the national distribution grid, and were granted permanent production licenses.

A professional team in the licensing department performed supervisory tours in 8 more sites with a 5 MW power, and found these projects eligible for a permanent license and therefore they will be brought to the assembly and granted a license.

The Authority has been working towards transparency, and thus regularly publishes an update for the entrepreneur regarding their licenses "lines" and status, on a daily basis and in a clear and transparent manner.

#### 5. <u>A "net metering" regulation (Authority decision no. 10, meeting 389, 25.12.2012)</u>

The regulation is based on a self- consumption electricity production which translates renewable energy into economic prices (parity grid) and allows it to compete under equal terms with conventional electricity - without additional cost and without subsidization on the part of the consumers. During 2012, and in light of the significant development that began with the costs of various new renewable technologies in recent years, the Authority outlined a reform that promotes the future of the entrepreneurship created in the field by directing it towards self consumption production using the accepted worldwide method-"net metering".

Net metering is a new renewable energy development method in Israel, which will assist every citizen in reducing their electricity consumption by using a private renewable energy production device, thus reducing their electricity bill.

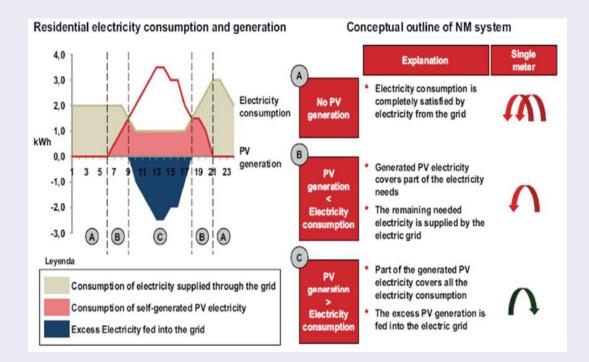
In doing this, Israel joins over 40 states in the USA and many other countries around the world which turn renewable energy to an available and useful tool for the private consumer, without raising the prices for the entire sector.

Consumers who chose to join the arrangement could subtract the electricity they produce from their electricity bill, and balance out the production surpluses with their consumption



surpluses. When a production device produces more electricity than the local consumption, that consumer will receive credit (in NIS). At the end of every bill period, the consumer's credit and the remaining charges in their electricity bill will be balanced out.

The net metering's advantage is that for the first time, renewable energy production facilities can be built without issuing extra charges to the electricity consumers.



This arrangement promotes a significant scope of facilities, while significantly minimizing the regulation procedure and the regulatory constraints they are required to. For instance, the proposed mechanism does not require a production license, since this is a simple tariff mechanism for settling the accounts between the grid and the consumer. In addition, each facility could produce energy without a time constraint (unlike the existing constraint in other 20 year long regulations), and without any other regulatory constraints. Thus, the Authority promotes the deregulation of the renewable energy field – beyond outlining the general framework of the field's development without intervening in the operational and financing considerations of the facilities, while continuing to fulfill their duty, which is guarding the public and the consumers' interests.



6. Future trend - the Kandel Committee and future regulations in the field of renewable energy

Government decision no. 3484 from July, 2011, instructed the Authority to regulate various technologies whose benefits for the sector are higher than their cost, beyond the quotas determined by the government in this decision. In addition, the decision instructs that this benefit shall be determined by an inter-office committee headed by the head of the national economy committee – Prof. Eugene Kandel, in cooperation with the Ministry of Finance, the Ministry of Environmental Protection, the Ministry of Energy and Water Resources, the Ministry of Industry, Trade and Labor and the Electricity Authority.

The Kandel committee operated during 2011-2012 and presented its conclusions to the ministers committee for renewable energies at the end of 2012. The Electricity Authority played an active and influential role in the committee and outlined the methodology used for calculating the saved value to the electricity sector as a result of combining various scopes of renewable energy.

This work included performing simulations, both by the Authority and the IEC, and essential issues in this field were analyzed, such as:

- The scope of infrastructure and capital savings as a result of the new renewable energy (credit capacity) and the benefit for the sector as a result of combining accumulating means and operational flexibility in these facilities (dispatch ability).
- The scope of fuel savings, including the specified fuel composition the electricity sector saves as a result of combining renewable energy facilities.
- The affect of the various combined scopes of renewable energy on the savings scope and the electricity grid's stability.
- The affect of the production dates on the electricity sector's benefit that arises from combining renewable energy facilities, benefits that arise from production located near the consumption site, etc.

In addition, the benefits for the sector that arise from saving on air pollution emission, employment, energetic security, etc. were quantified and evaluated by the various government offices.

The results of the committee's work is a methodology which can be implemented on a variety of technologies in various combination scopes in the electricity sector, which produces a "maximal price" for the integration of renewable energy into the grid.

The Authority believes that the results provided by the committee, as far as they are approved by the assembly, constitute the basis of the continuous combination of renewable energies in the electricity sector in Israel. the Authority is planning on examining decision no. 3484 and its appropriateness to the Authority's work principles, and publish graded pricing procedures (similar to the latest regulation published for home and business facilities in 2013) in a manner of tender- maximum tariffs, as required, and according to its Authority. This will assist in the integration of renewable energy into the Israeli electricity sector for



a lower price than the "maximum price" for the consumers, while maximizing the benefit the consumers receive from these devices, as well as meeting the government's goals of producing energy from renewable resources.

7. <u>Founding the Environmental Protection Department</u>

On September 2011, the Authority founded the Environmental Protection department. The implications of the environmental field on the electricity sector's activity served as the background for this department. In recent years we are witnessing new environmental considerations entering into the electricity sector in a variety of fields, including plans to reduce pollutants in the electricity sector, both for essential service providers and private suppliers, policies promoting renewable energy as part of the government's policies, a comprehensive legislation in the field of the environment (such as electromagnetic radiation, sewage treatment) which overlaps with the world of electricity sector have become significant for their economic scope of the electricity costs (for example - just the implementation of the renewable energy policies is expected to cause a price increase of more than 10% in the electricity cost in the next decade). The department was founded in order to manage the field of environment protection in the electricity sector in an integrative and educated manner, emphasizing, among others, the following:

- a. How the environmental policy is implemented in the electricity sector.
- b. Performing correct analysis of environmental costs and their assimilation.
- c. Presenting an educated policy for the integration of the environmental goals and the financial costs.
- d. Presenting an integrative situation report and assisting the different departments in the Authority with their environmental activities.





## 4. <u>Concerns regarding an electricity drought and consumer regulations:</u>

In the summer of 2012 Israel experienced an actual concern regarding an electricity shortage. In light of this, the Authority has been working towards creating and updating 16 emergency regulations - both for the entrepreneurs and the producers, which encourage savings and utilizing the electricity production options.

The Authority created a series of regulations capable of handling peak demand hours, both from the demand aspect as well as the production aspect.

These regulations were custom-made for the different producers, starting with the home consumers and ending with the large industrial consumers.

During this time, the Authority worked towards promoting and simplifying the options - for the benefit of the consumers, and created an optional infrastructure for the consumers to chose from, where they can chose their options and enjoy saving electricity, according to the incentivizing tariffs.

The Authority believes that according to the world trends, these and other regulations at its disposal can assist in the transition into a market where "a smart consumer is a saving consumer". The idea of shifting the responsibility on the one hand, and providing the option of enjoying electricity savings on the other hand, using the Authority's various means, is currently being examined by the Authority in terms of the public's response, the need to map the consumers' needs and expanding the choices, while upgrading them.

At the end of the summer, the Authority examined the contribution of the regulations intended to prevent an "electricity drought" and the results showed that the regulations contributed no less than 560 MW to the grid, which assisted in "surviving" the summer of 2012, whose average temperatures (and accordingly its electricity consumption) were higher than the perennial average.





The Authority's regulations for the summer of 2012:

The regulation	Who is it intended for	Description
Simple TOU	Every consumer (including private consumers whose yearly consumption is less than 40,000 KWh)	A TOU panel that only includes a peak and off-peak period for three seasons (winter, summer and tran- sition period) and the appropriate tariff sheet.
Conserve and save	Homogeneous tariff consumers (private and general) - 181,000 consumers registered for this arrangement	Reducing consumption by 15% - 20% grants a 10% discount, and a 20% - 30% reduction grants a 20% discount.
Smart consumerism (consumers' associa- tions)	All of the consumers. A contin- uous meter consumer (approx. 7,500 large consumers in Israel) can either join the IEC directly or join through an aggregator. The rest of the consumers - only through an aggregator.	The consumer signs an agree- ment with an "aggregator", who is a private business body that can perform demand reductions using unique technological means. The aggregator is obligated by the IEC to reduce the demands of the consum- ers who signed an agreement with him. In return, the IEC gives the ag- gregator 3.20 NIS per each reduced KW. The consumer receives credit from the aggregator according to their signed agreement.
Generators	A 500 KW generator consumer. The Authority has updated the minimal power to 250 KW.	The consumer is obligated to oper- ate the generator for 100 hours a year, and in return receives 3.5 NIS for every KWh produced by the generator.
Rolling peak	Consumers with 173 KW con- nection (and higher) who can reduce demands during peak hours.	The consumer is obligated accord- ing to the TOU sheet that entitles him to a built-in discount of approx. 4.5% of the annual bill. The tariff is multiplied by 4 during 100 hours a year, and the consumer must reduce his consumption during those hours in order to maintain the discount.



Private electricity suppliers	Suppliers who are not able to fully operate their production facility due to fuel supply or environmental constraints	These suppliers will receive a tariff for availability and energy so they can be operated. Suppliers not operating due to a gas shortage will receive gas from the IEC and will be available for the system's manager
Voluntary shedding arrangement	Large consumers	A registered consumer declares a power he can reduce and the mini- mum notice time he requires. The shorter the notice time is, the bigger the tariff he receives.
Expanding manda- tory TOU	For consumers consuming between 40,000 - 60,000 KWh per year	
Fourth regulation - renewable	Additional 30 MW	It should be mentioned that during shedding, renewable energy cannot flow to the national electricity grid.

All of the Authority's regulations have resulted in an additional 560 MW to the sector during the summer of 2012.

1. Generator owners can sell energy to the grid- criterion 46 - this arrangement allows private generators to sell energy surpluses to the grid in times of shortages of up to 100 hours a year, in return for incentive tariffs - according to the type of fuel the generator uses. So far, private generator owners were prevented from transferring energy surpluses to the grid, thus not utilizing their full potential. This arrangement enables selling energy to the grid in return for an incentive tariff, subject to the system manager's demands. This arrangement can assist in dealing with the expected electricity shortage during the summer of 2012/2013.

2. Expending the mandatory TOU - the mandatory TOU was expended to every consumer consuming more than 40,000 KWh (instead of 60,000 KWh). Expanding the TOU is another way to reflect the actual electricity production costs, transmitting it and distributing it to the large electricity consumers in the sector. This expansion is expected to contribute to the reduction of peak demand and to the general consumption reduction.

3. Expanding the rolling peak arrangement to low voltage consumers - until recently, only the high and medium voltage consumers utilized this arrangement. The Authority expanded this arrangement to the low voltage consumers with a 173 KW connection so these consumers could also contribute to the demand shift from peak hours to other hours. This arrangement is also expected to assist in reducing the peak demand in the upcoming years.

4. Real time arrangement (voluntary shedding) - regarding the heavy industry, the Authority has published a voluntary real time arrangement - during electricity shortages



caused by electricity production malfunctions - for shedding the large industry plants in Israel.

In these instances, the large electricity consumers will be disconnected from the national grid. Thus, preventing countrywide interruptions. The arrangement is due to reduce the sector's peak demand by approx. 200 MW in real time.

According to the demand reduction arrangement, by voluntarily shedding large consumers who are connected to high or medium voltages, each large consumer (such as large industrial plants, desalination facilities, etc.) which meets the terms of the arrangement and acts according to the system's manager's instructions, shall immediately reduce its electricity consumption (with a 30 minutes - 24 hours notice) and will receive an incentive shedding tariff. The shorter the notice time, the higher the tariff is.

This, as mentioned, in return for the tariff for each shed KWh and depending on the notice time and the time period of the shortage event. The offered arrangement is in line with the Authority's policy regarding consumption management and reduction. This is another layer who complements the existing shedding arrangements.

- <u>A consumer registered for this arrangement shall inform the manager regarding</u> <u>the:</u>
- Power he can reduce from his private facility during a shortage event.
- Minimal required notice time.
- Maximal shedding time period it can withstand.

Notice time	Tariff for reduced KWh in agorot
Over 24 hours	96.06
Less than 24 hours and up to 8 hours	107.26
Less than 8 hours and up to 4 hours	118.45
Less than 4 hours and up to 1\2 an hour	208.03
Less than 1\2 an hour	297.61

5. "Conserve and save" arrangement (20/20)

During June - September of 2012, the Authority has been operating a unique arrangement for home consumers who reduced their electricity consumption during the summer months - the "conserve and save" special offer.

In order to encourage this project, the Authority (in collaboration with the Ministry of Energy and Water resources) for the first time ever, used a radio campaign to encourage people to sign up for this offer. 181,000 consumers joined this special offer, which represent 600,000 of Israel's citizens.



The "conserve and save" arrangement promised a discount of up to 20% of the summer time electricity bill to anyone who can reduce their private home consumption. The Authority is currently examining the savings data and its efficiency for the upcoming years.

the campaign, which was publicized on national and local radio stations and in the written press, referred consumers to the Authority's website, which provides information regarding the offers and where consumers can sign up to participate in the offer.

The Authority also instructed the IEC to attach a written explanation of the offer to the recent electricity bills sent to all of its clients.

The principles of the "conserve and save" arrangement for 2012:

Every consumer who reduced their electricity consumption during the summer months (June - September) by 15% - 20% compared to the parallel billing period of the previous year will be entitled to a 10% discount from the electricity bill for these months.

For a 20% - 30% reduction, the consumer will be eligible for a 20% reduction of the electricity tariff for those months.

The average world success rates of these arrangements are approx. 10% of the consumers participating in the offer.

The principles:

Savings compared to the same time last year	Discount percentage
A saving of 15%- 20%	10% discount
A saving of 20%- 30%	20% discount

One of the lessons learned from this offer, which the authority published, is a significant increase in the fines issued to the IEC for failure to send meter readers to the field. This occurred after the Authority recognized a significant rise in initiated skips (omissions) in reading the electricity bill by the IEC, instead of actually reading the meters. For that reason the Authority published a public hearing last December regarding its intention to double the credit the IEC will have to pay those consumers whose meters were not read by the company.

The Authority wishes to note that the amount of initiated skips continues to rise in recent years, especially over the last summer, which witnessed a 2.8% increase in the bills submitted according to the initiated skip (a situation where the company does not send meter readers to the field) which results in an estimation of the consumption, and that serves as the basis of the bills. The amount of estimated bills grew compared to last year.

The company's behavior on this matter is a cause for worry for the general consumer population in general and the "conserve and save" population in particular. This is due to the fact that the company has failed to send meter readers to the field and thus did not read the actual consumption data but rather performed a statistical evaluation of their consumption. This behavior raises the concern that the consumers registered for the "conserve and save" program whose meters were not actually read but rather estimated,



received a high evaluation, while in reality their consumption was reduces, but they did not receive the discount they deserved.

6. Recruiting private power stations for electricity production during a gas shortage event -

Regarding the electricity production aspect, the Authority has published a regulation for private consumers which resulted in an additional 200 MW.

The Authority recruited private power stations were to create electricity in the summer of 2012.

For the first time an arrangement was made to recruit 5 private power stations, with a scope of 200 MW, to produce electricity for the entire sector.

This is an unusual arrangement according to which during extreme circumstances the IEC is entitled to recruit various private production units, who themselves suffer from a gas shortage, in a manner that can stop their operation. These stations will be recruited for the benefit of the IEC, which in turn will supply its own gas to the stations, thus freeing up its own stations for the use of other fuels.

Thus, private suppliers operating solely on natural gas who are currently not operational due to a lack of natural gas, will receive natural gas from the IEC and in return they are obligated to operate the station and supply the electricity produced there to the entire sector.

Suppliers operating with non natural gas fuels will receive the fuel cost for the hours in which they were producing electricity for the national grid.

In light if of the fact that there is an actual concern regarding supplying all of the electricity demands during the summer of 2012, and in order to allow the system's manager to maintain the proper reserves amount that will allow the production system's normal operation, the Authority has determining another unique arrangement which allows private electricity suppliers who are currently inactive, or are only partly active, due to fuel supply constraints or environmental constraints, and have a production license - to make their facilities available for the system's manager.

7. Expanding mandatory TOU for consumers consuming over 40,000 KWh a year

The TOU is a more accurate expression of the production cost than the homogeneous tariff. It minimizes the cross subsidization and shift consumption away from the high demand hours. The TOU does not apply to the entre consumer population since a TOU meter is more expansive than the homogenous one. The trend in recent years is to lower the TOU meter prices. Accordingly, the financial department has examined the profitability of lowering the consumption requirement bar from 60,000 KWh a year to 40,000 KWh. On 16.5.2011 the Authority made the decision to expand the TOU to consumers consuming over 40,000 KWh per year.



#### 8. Smart consumption arrangement

It is customary in the Israeli electricity sector, as well as other electricity sectors around the world, to supply demand in two ways: increasing production or decreasing consumption. Consumption decrease is done by encouraging consumers to voluntarily reduce their consumption. In return for the reduction, the consumer receives a monetary incentive which expresses the alternative marginal cost of the electricity production during these hours.

Since its establishment, the Authority has determined several consumer arrangements for shortage management, according to the various needs of the sector and the consumers' ability to meet demand reducing requests. These arrangements are operated at limited amounts of "tough" hours of the year, which are the hours when consumers are obligated to reduce their consumption according to the instructions of the system's manager.

The "smart consumption" arrangement is a voluntary one. Consumers who have a continuous meter can chose weather to join this arrangement directly through the IEC or through an "aggregator". Consumers who do not have a continuous meter (including private home consumers who until recently were not a part of any arrangement) can join the arrangement only through the "aggregator". An "aggregator" is a corporation that installs consumption reducing devices in the client's facility and manages the consumption reduction according to the instructions of the system manager for the consumers he is engaged with.

The "aggregator" also receives compensation for reducing the direct consumption from the IEC and transfers some of it to the consumer, according to their signed agreement. Consumers with a continuous meter, who operate directly through the system manager, receive their compensation directly through him.

An "aggregator" is required to a proven ability to use the proper technology to service the consumer in order to regulate the consumption in the facility. For example, the Authority is aware of the technologies available in the market that can reduce demands for specific appliances, such as: dishwashers, washing machines, air conditioners, etc, without disconnecting the facility and sometimes even without disconnecting the appliance, but rather just regulating its consumption.

The arrangement determined by the Authority is similar to those in the USA, England and other countries. The aggregator is obligated by the IEC to reduce demand. Simultaneously, the aggregator signs agreements with consumers willing to reduce demands. The rationale behind these arrangements is that the system manager does not sign any direct agreement with small or medium size consumers, since he is not equipped to manage a large accumulation of consumers whose general demand reduction is significantly lower compared to the demand and supply he is managing at any given moment, therefore, the aggregator saves the system manager the need to manage and settle the accounts of single consumers, as well as the need to educate himself in every technology that promises the required demand reduction, and it allows a more general consumer population to take part in the management arrangements and contribute to the general effort to save electricity



while gaining compensation in return.

The same applies to the Authority's arrangement - the large consumers, which together consume more than 50% of the total sector's consumption, can operate directly through the IEC, knowing that they have the technological means for a continuous measurement and the size that allows the company to view them as a significant consumer. Small and medium size consumers interested in joining the arrangement are required to do so through the aggregator, since they are not the system manager's target audience and he does not possess the logistical and technological abilities to reduce these consumers' demands. In conclusion, the "smart consumption" arrangement is a voluntary arrangement similar to the one implemented around the world. It provides consumers ,who until recently were not part of the shortage management arrangements, with the opportunity to participate in the sector's demand reduction, without imposing on the system manager the task of introducing new technologies, supervising, managing and settling the accounts of a consumer sector whose contribution to the demand reduction is a modest one, while the mechanisms the manager will have to built in order to accommodate them are unreasonable. Under these conditions, the "aggregator consumer" is an essential and necessary thing.

9. Simplifying the home TOU (decision 2, meeting 361, 31.1.2012 - setting a TOU tariff - simplifying home electricity consumers)

This arrangement for the home electricity tariff makes the consumption tariff timedependent, so that every consumer can reduce their private electricity bill. Each consumer can examine the profitability of joining the arrangement according to the simulator published under to the Authority's guidance, on the IEC's website, and accordingly decide whether or not to join the new arrangement.

The electricity consumption during the cheaper hours will save consumers up to 15 agorot per each KWh.

The Authority's data reveals that consumers who meet the arrangement's requirements and are capable of shifting the consumption to cheaper hours, operating according to the new tariff, could save hundreds of NIS per year.

This regulation allows consumers to lower their electricity bills by shifting the demand from the more expansive peak hours to the more inexpensive off- peak hours.

This is a voluntary arrangement to which only the consumers who want to join will join. The arrangement determines different prices for two different hour clusters during the day, while the transition period (7 months per year) only offers one tariff.

This arrangement allows the appropriate consumers to shift their energy consumption from the expansive hours to the inexpensive hours, thus reducing the electricity bill without changing the demands. For example, a consumer operating the washing machine, dishwasher and the water heater during the cheap off- peak hours can save approx. 400 NIS a year.



This move creates several benefits, which include:

- Minimizing consumers' costs reducing the electricity costs for home consumers. Especially in this time of expected raises in the electricity tariffs, the Authority is further strengthening the consumer arrangements, according to their choice, in order to provide the consumers with the ability to regulate their consumption and minimize cost.
- 2. The environment and improving consumption shifting consumption away from the expansive hours will reduce the total amount of polluting fuels, thus contributing to the general emission reduction while producing electricity. This will further the interests of the Ministry of Environmental Protection and will result in cleaner air for the consumers.
- 3. Preparing for an electricity shortage during the summer of 2013 this arrangement allows the reduction of the peak demand during the summer and winter, thus serving as a preparation tool for the summer of 2013, when an electricity shortage is expected. For this reason the arrangement includes an incentive for the IEC to recruit more clients to join the arrangement prior to the beginning of summer 2013.
- 4. Giving the consumers options to chose from the arrangement is not mandatory but rather a consumer can decide if it's the right arrangement for him after participating in it for the duration of one year. In addition, this arrangement is an accumulative tool which is part of the Authority's existing tariff arrangements, and does not cancel out other arrangements (for example a consumer who prefers to remain with the average tariff and\ or a consumer who would rather chose the more complex TOU).
- 5. Simplicity a significant simplification for the consumers- using a clear definition of when the most expensive electricity production peak hours occur.
- 6. Significant savings for the consumers a consumer entering this arrangement will enjoy 7 months of a reduced tariff compared to the home tariff, regardless of the consumption hours.

A simple TOU is:

Electricity is not produced in even amounts across the hours of the day, but rather it changes according to demand. In order to supply the demand, various technology operated power stations must be operated. As demand increases, less efficient power stations are activated. This means that consumption during the high demand hours creates higher production costs for the energy unit (KWh). This is because that in order to provide more KWh, the power stations that use more expansive fuels must be operated. In other words, electricity is cheaper during the off-peak hours, and more expansive during the peak hours (summertime: 10:00 - 17:00, wintertime: 16:00 - 22:00).

Accordingly, the simple TOU peak hours were reduced from 9 tariffs across the entire year, into 5 different tariffs. The demand hour clusters are separated by their marginal cost (the cost required to produce another energy unit) both during the different seasons and the different consumption hours. These five clusters are a peak and off-peak every day, for each season - summer and winter. During the transition period there is one tariff for each hour of the day. From now on, each consumer can know the best times to operate the



washing machine, the dishwasher and other appliances in their home. Israel now joins the leading countries in the world that operate various electricity tariffs during the day, allowing their consumers to save electricity and money.

Simplifying the TOU for small consumers is expected to encourage more small consumers to join the voluntary TOU, since it is simpler and easier to use, and mostly helps manage their home\ office appliances in an efficient and cost saving manner.

Season	Demand hour cluster	Voluntary simple TOU (agorot)
Winter	Off-peak	39.09
	Peak	106.15
Transition	Off-peak	38.67

Off-peak

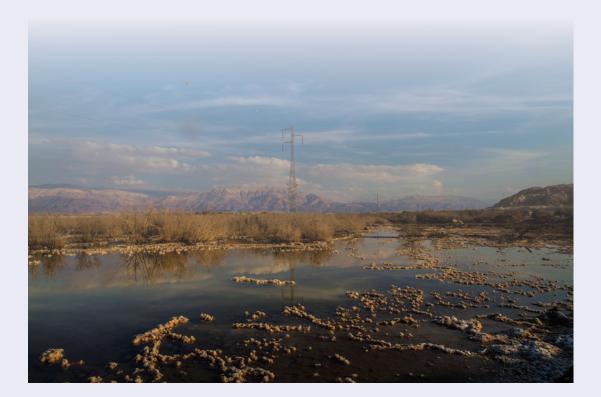
Peak

Summer

35.75

116.96

Simple TOU for consumers charged according to the voluntary TOU - agorot per KWh





## 5. Private electricity producers entering the market

After dozens of years in which the IEC had as a complete monopoly of the production segment, over the last two years, the Authority has been working hard at introducing private suppliers into the electricity sector, with a significant rate of approx. 30% of the electricity production ability in Israel in the upcoming years.

Starting with 2013, the large private power stations, OPC, Dalia and Dorad, are expected to become operational. Their entrance into the sector, as well as their regulations and licenses, were performed by the Authority's team.

This entailed dealing with the large private suppliers' financial closings, the last of which is Dalia. In this regard, the issues of ownership and equity were examined (see appendix I - the Authority's decision - private electricity suppliers).

 Criteria for high and ultra high voltage connections (the Authority's decision no. 1, 3.12.2012 - criteria and tariffs for connection work for high and ultra high voltage).

As part of the preparations for the entrance of new private players into the electricity sector, the Authority has published a regulation for the connection of large private producers to the electricity grid.

This decision meticulously regulates the tariffs, schedules and appeal procedures of the engagement between the large producers seeking a high and ultra high voltage connection to the electricity grid and the IEC.

This regulation expresses the Authority's obligation to regulate the sector as an objective regulator between the other players in the market.

In addition, the decision determines a comprehensive definition of all of the stages in the process of connecting to the high and ultra high voltage grid; updating the connection tariffs paid by the private suppliers to the IEC, inflexible schedules for the entire complex process of new players with significant production abilities entering the market and connecting to high voltage. The abovementioned electricity suppliers use various technologies, including clean energy.

For the first time, the regulation determines that significant fines will be paid by the IEC for delays in connecting the private players, which is against the determined criteria. These fines were determined after several complaints on the matter have been brought to the Authority's attentions. For example, the regulation determined a fine in the amount of 0.5% of the connection tariff for every day of delay, should the company exceed the allocated time according to the regulation for the completion of the connection survey to the electricity grid.

In addition, the Authority determined that in the event of an unreasonable delay regarding the initial request of an electricity entrepreneur requesting to join the grid, failure to



response to this entrepreneur will be regarded as a positive answer. Thus, the Authority is operating according to its obligation, which is to create the conditions for a competitive environment and provide solutions to the heavy entrance block the private players are experiencing when trying to penetrate this extremely monopolized market.

Furthermore, the Authority also reinforces appeal and ruling mechanisms for disputes between the IEC and the private players, while maintaining professional ruling rights to the Authority's professionals.

This is the regulation the market has been waiting for a very long time, and it is an essential and central layer in the entrance of private producers and large consumers into the market.

Simultaneously with publishing the decision, the authority is intending to issue a public hearing during 2013, in which it will request the public's response to determining the fees the private suppliers will be charged with, should they fail to meet their synchronization schedules with the electricity sector. This way the Authority expresses the consumers' interests, which states that even though these private players should be supported, they must also meet the schedules for their integration into the electricity sector, since it is dependent on their timely connection.

2. Confirming the activation of the Dalia power station, and examining and preventing cross costs between electricity suppliers in the gas field:

(decision no. 2, meeting 381, 6.8.2012 - updating the licenses of Dalia Power Energies Ltd, decision no. 1, meeting 383, 5.9.2012 - revising the (renewed) licenses of Dalia Power Energies Ltd ( decision no. 5, meeting 384, 10.9.2012 - revising criterion 130 - defining a senior debt).

The Authority was required to examine the principles of granting licenses for private electricity production in a world of a gas monopoly. The Authority determined that the condition for granting a private production license is removing the bodies involved in the gas monopolies Tamar and Leviathan from the license ownership (decision no. 1, meeting 377, 14.6.2012). Thus, in the license issue of the private producer Dalia, the Authority approved the ownership structure of the Dalia Power Energies Ltd licenses, but stipulated it upon the removal of the HIRAM - EPSILON group from the project, after declaring the Leviathan drilling as a discovery.

The Dalia Power Energies Ltd group is in the final stages of establishing a natural gas power station in the Tzafit site. Upon its completion, the station is intended to supply approx. 870 MW, and it will include two facilities that combine gas and steam technology, with a 435 MW power each.

After a complicated professional examination, the Authority has determined its decision regarding the updated production license of the Dalia license owner. The Authority was required to examine whether the new ownership structure in Dalia upholds the minimal equity standards, and in addition, weather it requires the Authority's intervention, in light of the involvement of various bodies with the electricity producer in the field of gas (Hiram



Epsilon Company and the Phoenix Company owned by Yitzhak Tshuva, who is one of the owners of the Tamar reservoir).

The Authority verified the existence of the equity of the license owner, but this is conditioned upon the extensive changes Dalia will be forced to make in its internal agreement system as well as receiving a signed obligation from the license owner, which will be added to the decision,

The Authority has made it very clear in its decision that upon the declaration of the Leviathan drilling as a discovery, the Landau family, which has indirect control of the licenses owner, through the Hiram Epsilon Company, will have to completely remove itself from any involvement in the Dalia Company.

As to the Phoenix's involvement in the company, the Authority states that there is a difficulty with this company's involvement, which requires examination, even if it is only a sponsor, in light of the fact that the financing agreements determined that the financiers are involved in approving gas agreement related issues. Nonetheless, due to the fact that Dalia Company chose to announce the removal of the company from the licenses owner itself, the Authority's examination became redundant, but is still would like to be informed on any new involvement of a gas field related body.

It should be mentioned that this is not the first time that the authority had to deal with the ownership structure of electricity suppliers out of competitive considerations. In previous decision, from 2011, the authority limited the involvement of the Delek Group in electricity production stations (decision no. 2, meeting 338, 6.6.2011 - various issues in the suppliers' structure in the gas field and its affect on electricity tariffs).

In addition to changes in the company's ownership structure, the authority demands that the Dalia Company will perform several changes in the regulations, as a condition for receiving the reorganization of the ownership structure as equity. Among other things, the Authority demands that a paragraph will be added to the declarations chapter in the investment agreement, according to which the procurer knows that the issuing company is intending to present the investment as equity as a condition for receiving a license, and that a condition for this is that the investment does not create any contractual obligation for a fee for the procurer, which can be enforced, and that any type of payment given before liquidation will be according to the discretion of the issuing company's directorate. In addition, the regulation should be revised in such a manner that the directorate will not be obligated to declare a dividend distribution, even in light of the distribution tests in the agreement.

In addition, the company is obligated to inform the Authority on any event in which the capital will not be considered equity, regardless of a change in circumstances or an accounting standard.



# 6. Challenges facing the electricity sector in 2013

According to the layout formulated by the Authority's chairwoman and in light of the expected challenges facing the Authority, the year 2013 is expected to be a very challenging year. The projects the Authority is promoting this year are of great importance to the possibility of promising a comparative and sustainable electricity market in Israel, in four levels:

- 1. Balance: balancing the regulation load of the regulated bodies.
- 2. Proportionality
- 3. Transparency: continuing increasing the regulatory certainty, transparency of the Authority.
- 4. Control and enforcement: instructing the players about the norms in these fields, regarding gas suppliers who are also involved in electricity production, preventing excessive costs for the public, implementing the market's rules when managing the system after a private supplier enters the market, and more.
- 5. Finishing taking care of various issues regarding the IEC and the completion of a regulatory infrastructure for cost allocation between the sector players and the IEC.

## Governmental challenges in the 2013 electricity sector:

- Continuing the examination of the natural gas field
- Completing the design of future market rules for entering players (missing tariffs, system management and more)
- Long term policy regarding renewable energies
- Adding new positions and manning existing positions in the Authority
- Examining the possibility of lowering the regulation blocks





# III. The Authority's Assembly:

According to the instructions in clause 22 (a) of the Electricity Sector Law, the Authority's assembly includes five members, appointed by the government, according to the ministers' suggestions, and they are:

The Authority's chairwoman - until 1.9.2011, Mr. Amnon Shapira held the chairperson position; upon his retirement, Ms. Orit Farkash- HaCohen was appointed in his place.

Two government representatives - the representative for the Minister of Energy and Water Resources - Mr. Doron Aharon, and the representative for the Minister of Finance - Mr. Oren Moshe (replacing Mr. Udi Adiri since July 2011).

Two public representatives - Mr. Ofir Buchnik and Ms. Michal Shlomo (appointed October 2010).



## Orit Farkash - HaCohen

Attorney Farkash-HaCohen has an MPA in Public Administration from Harvard University, and an LLB degree from the Hebrew University of Jerusalem. In 2011 Attorney Farkash- HaCohen was appointed chairwoman of the Authority. Prior to that, between 2003 and 2011, she served as the legal advisor to the Authority and the Authority's Assembly, and had a significant role in the Authority's senior management team, involved in the Authority's regular managerial and strategic decisions and the assembly's work methods.

Before she joined the electricity Authority, attorney Farkash-HaCohen served as a team leader in the legal department of

the Restraint of Trade Authority, where she worked for five years. She completed her law internship at the supreme court of Israel, working under the honorable judge Dalia Dornar, and later worked for the Shimron Malcho Preski law firm, specializing in civil- commercial procedures and litigation.





#### Accountant Ofir Buchnik

Term - February 2010 - February 2013

Mr. Buchnik (39) has a Bachelor of Accountancy from Bar Ilan University.

Mr. Buchnik is a managing partner and the owner of an accounting firm and a financial consultant company, which consists of 40 accountants, economists and lawyers, providing services to hundreds of clients, including government offices and local authorities, public and private companies, institutional and financial bodies. The firm specializes in micro and macroeconomics, as well as complex and extensive financial analysis

and financial closings.

In the past, Mr. Buchnik served as the CEO and partner in the "Zohar, Zohar and Co. Management LTD.", which provides economic- accounting consultation in the fields of business, institutional and municipal activity. Mr. Buchnik also served as the manager of a team of economists in the accounting firm Fahan- Kane and as an auditor in the O.D.B professional department of Ziv Haft, accountants.

Mr. Buchnik has served as a member of the International Jewish Congress Committee, a member of the Committee for Municipal Control and Accounting and as a member of the Committee for NPO's, Associations and the Voluntary Sector.



#### Accountant Michal Shlomo

Term: October 2010 - October 2013

Ms. Shlomo (39) has a Bachelor of Accountancy and Economy, and an MBA, specializing in finance.

Ms. Shlomo manages the directors and position holders insurance and business and re-insurance team for the "Menora Mivtachim Ltd. Company". Prior to that, Ms. Shlomo served as a credit controller and credit risk manager for the Bank of Jerusalem. In the past, Ms. Shlomo served as an analyst for the bank's real estate sector, as well as an accountant for a hightech company.

Ms. Shlomo is also a director in "Inbal - Insurance Company",

and a member of the Finance and Audit committee. She has also served in the past as a director of the "investment fund for workers on the standards scale".





#### Mr. Doron Aharon

#### Term: June 2010 - July 2013

Mr. Aharon (39) graduated from the Open University's Department of Economics, as well as a B.A in Psychology and an MBA, specializing in finance, from the Hebrew University of Jerusalem.

Mr. Aharon manages the Information and Economic Analysis Department and is in charge of the economic field in the Electricity Authority in the Ministry of Energy and Water.

In the past, Mr. Aharon served as a senior investment advisor for Bank Hapoalim, in charge of assets and investment portfolios' management and consultation, and in the Israeli's Knesset's research

and information center, managing and performing research and information documents on the subjects of R&D, macro economy and energy.



#### Mr. Oren Moshe

#### Term: August 2012 - August 2015

Mr. Moshe (33) has a bachelor's degree in economics as well as an MBA from the Hebrew University of Jerusalem. For the past seven years, Mr. Moshe has been serving as an accountant general referent; communications referent for the Budget department; trade and labor coordinator for the Budget department and since June of 2012, as the energy coordinator for the Budget committee.



# IV. The Authority's key responsibilities and authorities according to the law

According to clause 30 of the Electricity Sector Law - 1996, the Authority's responsibilities are as follows:

- 1. Determining tariffs for electricity consumers.
- 2. Determining the service obligations of the IEC to its consumers.
- 3. Performing cost control in the IEC.
- 4. Granting licenses, approved by the minister, for activity in the electricity sector.
- 5. Determining economic arrangements for the license holders and private entrepreneurship in the electricity sector and the IEC.
- 6. Determining economic arrangements (tariffs) for the promotion of clean energy activities.
- 7. Promoting arrangements regarding consumption management and efficiency.
- 8. Ruling on consumers' complaints.
- 9. Minimizing the sector's costs.
- 10. Creating the conditions for competition in the electricity sector.



## The Authority's departments:

#### Regulation department:

According to the sector's new structure, as determined by government decision no. 2438, on 15.8.04, the regulation department has been founded - and it is in charge of creating criteria, tariffs and regulations which will serve as the basis of the sector's future activity after the entrance of private producers, new distribution companies and electricity suppliers.

The department's activities focus on promoting renewable energy facilities, as well as examining the affects of emissions from different power stations on the electricity tariff, and determining the premiums for non- pollution, in collaboration with the Ministry of Environmental Protection. A financing consultant is assisting in the activities, and the department is collaborating with the Authority's Licensing department, engineering department and Economy department.

## Licensing Department:

According to government decision no. 2438, from 15.8.04, and according to the third revision instruction in clause 30 of the Electricity Sector Law - 1996, the Authority is in charge of granting licenses to operate in the electricity sector, and supervising them. For those purposes, a Licensing and Supervision department has been established, and has been operating since its establishment to regulate the abovementioned activities. The department is in constant contact with the license requesters in the fields of production, distribution and supply, and it provides recommendations for the licenses to the assembly, as well as supervises their lawful operation.

## Economy Department:

The department's duties include, among others, the following activities:

- 1. Determining tariffs, including:
  - a. IEC tariffs for all supervised segments (production, system manager, transmission, distribution and supply) and other essential service providers for distribution and supply (such as the East Jerusalem Electric Company and Kibbutzim).
  - b. Energy procurement tariffs from various electricity producers.
  - c. Backing up additional services and managing the system.
  - d. Infrastructure tariffs for the electricity grid.
  - e. Consumerism services .
  - f. Demand management arrangements.
- 2. Economic consultation services for the Authority's assembly and the Authority's departments.
- 3. Examining the development plan (projects' profitability) both for cost control and for providing a professional opinion during the consultation process.
- Determining the criteria for the system manager's economic behavior in the field of unit loading and the field of trade management, from the tariff aspect, according



to the determined branch structure (yield return, price per unit, marginal cost, etc.) for the purpose of minimizing costs and lowering the tariff for the electricity consumer's benefit.

#### Accounting and Methodology Department:

The department is in charge of analyzing the essential service providers' financial reports in order to examine the compatibility of the registrations to the tariffs structure determined by the Authority, including the implementation of efficiency coefficients. This department initiates demands to submit unique reports to the Authority, which will be used for costs control.

#### Engineering Department:

The department is in charge of determining the service, reliability and quality criteria of the electricity supply, as well as handling shortage arrangements. The department also deals with regulating different issues relating to grid connections for all voltage levels, initiated grid work (on the account of others) as well as the historic distributer issues. The department is in charge of examining private producers' feasibility and connection surveys for the distribution and transmission grid, and assists other departments in defining the tariff structure (dividing into activity segments). The department is also responsible for the technical aspects of the smart metering and smart grid.

#### Public Appeals Department:

The department is in charge of setting the consumerism criteria, performing the required updates and changes and organizing them for the assembly's approval.

The department works with the consumer population and the various consumers' associations, as well as with inter-governmental and external consumerism authorities. According to clause 37 (2), the department examines consumers' complaints and provides rulings on the issues. The department's rulings are obligatory for the essential service providers, and must be implemented.

The department is also in charge of implementing the instructions of the freedom of information law - 1998.

#### Management Department:

The organization and management department is in charge of all managerial and administrative activities in the Authority, including: managing the Authority's budget and all of its regulations, human resources, training, welfare, locating and sorting employees, women's status, discipline, attendance, concentrating all of the department's consultation requirements, issuing tenders for consultants\ service providers, managing engagement contracts, accounts, salaries, logistics, procurement, building, property, storekeeping and sector, vehicles, office committees, housing, advertisement, working with the Authority's accountant, providing general administrative support and assistance to all of the Authority's departments, etc.

#### Legal Department:

The legal department is involved with every other department, handling a variety of issues relating to the Authority's daily work, including the constant presence of the legal



advisor in assembly meetings, writing legal opinions during the professional teams' work or submitting them to the members of the assembly, representing the Authority with the attorney general and the various instances, some of which include providing a solution to disputes with other government bodies.

The Assembly's Administration and Spokesmanship:

The administration is responsible for the day to day operation of the Authority's assembly, tracking the policy implementation determined by the chairwoman for submitting suggestions for the assembly's discretion as well as integrating and coordinating the assembly with the different departments in the Authority.

During 2012, the administration department began strengthening the integration and collaboration between the electricity sector's regulatory bodies around the world, contacting international regulation bodies and global regulation authorities.

In addition, the spokesmanship is in charge of providing responses to the media, sharing the Authority's work and decisions with the public and communication initiatives.

## The Authority's organizational structure

According to clause 43 of the Electricity Sector Law - 1996, the Authority's employees are civil servants and are required to follow the Civil Service Law (members) - 1959.

The Authority's organizational structure is a flexible one, and over the years it has adapted itself to the ever-changing realities and needs of the electricity sector in Israel. Accordingly, some position holders in the Authority are involved in several different internal departments. The Authority is currently operating with only 47 available positions. In the last year the Authority has been consolidating a change in the organizational structure, and a significant manpower addition is required in order to achieve all of the Authority's tasks and goals. Currently, this issue is at the advanced stages and is being reviewed by the civil service commission.

As of December 2012, the Authority's senior employees are: **Mr. Oded Agmon -** Head of the Regulation Department **Ms. Tanya Ilrianov** - Head of the Environment Protection Department **Ms. Talia Illuz** - Head of Management A Department **Mr. Moshe Ben Yair** - Head of the Engineering Department **Ms. Meirav Yosef** - Head of Consumerism Department **Attorney Michael Mackia** - the acting legal advisor to the Authority **Accountant Eitan Flis** - Head of the Accounting Department **Ms. Nurit Felter** - Spokesperson and Secretary of the Authority's assembly **Mr. Menachem Kamish** - Head of the economy Department **Mr. Moshe Shitrit** - Head of the Licensing and Control Department



# Appendix 1: The Assembly's decisions according to subjects:

The following are the Authority's decisions sorted by dates, with internal sorting according to subjects:

Decisions regarding obligation to consult:

1	10.1.2011	322	obligation to consult	The Authority's position as part of a consultation com- pany on the subject of extending the legality of the elec- tricity sector's regulations (cogeneration) until 1.1.2014.
2	17.1.2011	323	obligation to consult	The Authority's position on upholding the obligation to consult on the subject of the electricity sector's regula- tions (terms and procedures for granting licenses and the obligations of the license holder (revised) - 2010.)
7	16.5.2011	335	Yearly update	Obligation to consult - granting a permit to the IEC to operate in the communications field.
2	1.8.2011	345	obligation to consult	Revising the electricity sector's regulations (terms and procedures for granting licenses and the obligations of the license holder - 2011, electricity sector's regulations (conventional private electricity producer), the electric- ity sector's rules (transactions with an essential service provider.)
17	8.8.2011	346	obligation to consult	Consulting with the Authority on the subject of revising the electricity sector's regulations (terms and proce- dures for granting licenses and the obligations of the license holder) - 1997.
2	5.12.2011	355	obligation to consult	Obligation to consult the Authority on the subject of postponing the dates determined in various clauses in the Electricity Sector Law, 1996, until 1.1.2013.
з	5.12.2011	355	obligation to consult	Obligation to consult the Authority on the subject of electricity sector's regulations (terms and procedures for granting licenses and the obligations of the license holder - 1997).
2	19.12.2011	357	Biomass	Obligation to consult the Authority on the subject of us- ing biomass units in the IEC's coal power stations.
1	14.5.2012	372	obligation to consult	The Authority's opinion, as part of the obligation to consult, regarding Ashdod Energy's request not to use the infrastructure services.
2	14.5.2012	372	obligation to consult	The Authority's opinion, as part of the obligation to consult, regarding Ramat Negev's request not to use the infrastructure services.
3	14.5.202	372	obligation to consult	Consulting with the Authority on the subject of revising the electricity sector's regulations (conventional private electricity producer) - 2005.



3	4.6.2012	375	obligation to consult	The Authority's opinion, as part of the obligation to consult, regarding a transportable gas turbine vehicle of the IEC.
2	3.12.2012	388	IEC	Obligation to consult the Authority on the subject of delaying the dates of separation between the supply activity and the distribution activity until 1.1.2014.

# Decisions regarding Private electricity suppliers:

			Private electricity	Revising the electricity procurement agreement
3	17.1.2011	323	suppliers	between the IEC and OPC company
4	24.1.2011	325	Pumped storage	Revising the decision from meeting 279, 8.11.2009, on the subject of "tariff regulation for a private electricity supplier operating with pumped storage technology"
2	7.2.2011	326	Noga Paz	Not changing the tariff formula for diesel genera- tor production units operating with mazut
3	21.2.2011	327	Pumped storage	Revising the Authority's decision no. 279 ( tariff regulation for a private electricity supplier operating with pumped storage technology)
3	12.3.2012	366	Pumped storage	Pumped storage
5	23.4.2012	369	Conventional supplier	Principles for recognizing the costs for an essential service provider for electricity procurement agree- ments and the provision of infrastructure services to conventional private electricity producers in permanent availability transactions, pumped stor- age suppliers and renewable energy producers with solar technology to the transmission grid, wind farm and gas facilities
6	2.4.2012	369	Private suppliers	Clarifying the terms of non duel fuel private pro- duction activity in the event of a general shortage in the natural gas supply
2	4.6.2012	375	Private electricity suppliers	Revising the Authority's decision from meeting 268, 19.7.2009, regarding tariff arrangements that sup- port financing private electricity suppliers
1	25.6.2012	378	Tariff	Revising appendix A to decision no. 1, meeting 367, 22.3.2012
5	10.9.2012	384	Criteria	Revising criterion 130 - defining a senior debt
1	3.12.2012	388	Criteria	Criteria and tariffs for connection work in high and ultra high voltage
3	6.6.2011	338	Diesel generator	The decision regarding updating the tariff for diesel generator production units operating with mazut and connected to the distribution grid



# Decisions regarding the Electric Corporation:

1	20.1.2011	324	Emergency plan - stage B	The Authority approves a project scope of approx. 15 million dollars to the IEC
1	7.3.2011	328	Debt distribution	Distributing the IEC's debt in order to prevent an electricity shortage
1	14.3.2011	329	Emergency plan	The deciding time to reduce costs due to not meeting the emergency plan's schedule
1	20.6.2011	339	Gasification vessel	Principle recognition of the leasing costs of a gasification vessel
1	14.11.2011	353	IEC	The planned deposits to the designated account
3	5.9.2012	383	Gasification vessel	Recognizing the leasing costs of the gasification vessel and recognizing the LNG costs by the IEC
7	26.11.2012	387	IEC	Postponing deposits - distributing the IEC's debt in order to prevent an electricity shortage

# Decisions regarding licenses:

1	24.1.2011	325	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
1	21.2.2011	327	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
2	21.2.2011	327	<u>Licenses</u>	Granting a licenses to the OPC Company Mishor Rotem
4	14.3.2011	329	<u>Licenses</u>	Canceling the licenses of Clal Industries and Invest- .ments Ltd
1	24.3.2011	330	<u>Licenses</u>	Production licenses to the IEC
1	4.4.2011	332	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
1	2.5.2011	334	<u>Licenses</u>	Granting a conditional license and a permanent license for the establishment of photovoltaic technology elec- tricity production power station for Ashelim tender
2	2.5.2011	334	<u>Licenses</u>	Granting a conditional license for the establishment of an electricity production power station (cogeneration) for The Dead Sea Works
1	23.6.2011	336	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities connected to the distribution grid



1	30.5.2011	337	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
2	30.5.2011	337	<u>Licenses</u>	Revising the Haifa 4 production license for the IEC
1	6.6.2011	338	<u>Licenses</u>	Granting a conditional license for the establishment of an electricity production power station (cogeneration) .for IPP Delek Ramat Gabriel Ltd
1	27.6.2011	340	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
2	27.6.2011	340	<u>Licenses</u>	Revising the conditional license and the permanent license for the establishment of a photovoltaic electric- ity production power station - Ashelim Tender
з	27.6.2011	340	<u>Licenses</u>	Revising the permanent licenses given to the IEC's pro- duction units - adding clause 10 c. to the licenses
2	4.7.2011	341	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
1	18.7.2011	343	<u>Licenses</u>	Granting a conditional license for the establishment of an electricity production power station (cogeneration) .for Paz Ashdod Oil Refinery Ltd
2	18.7.2011	343	<u>Licenses</u>	Updating the license for Dalia Power Energies Ltd
1	25.7.2011	344	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
1	1.8.2011	345	<u>Licenses</u>	Updating the license for Dalia Power Energies Ltd
15	8.8.2011	346	<u>Licenses</u>	Granting a permanent license to the biogas technology electricity production facility for the Tambor Hefer and Co, Ecology
16	8.8.2011	346	<u>Licenses</u>	Granting a permanent license for the establishment of a biogas technology electricity production facility for Eco .Energy Golan Ltd
1	3.10.2011	348	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
2	3.10.2011	348	<u>Licenses</u>	Canceling the conditional licenses and granting licenses for the establishment of solar technology electricity production facilities connected to the distribution grid Moshav Gilat and Moshav Avigdor
3	3.10.2011	348	<u>Licenses</u>	Revising clause 10 c revising the decision from meet- ing 340



2	10.10.2011	349	<u>Licenses</u>	Determining a generic permanent license for electricity production in photovoltaic facilities connected to the distribution grid
З	10.10.2011	349	<u>Licenses</u>	Updating the B.S.I Ein Harod solar facilities 2010, limited partnership
4	10.10.2011	349	<u>Licenses</u>	Updating the B.S.I Ma'agan solar facilities 2010, limited partnership
5	10.10.2011	349	<u>Licenses</u>	Granting a production license to the photovoltaic tech- nology electricity production to Ketura Sun, Lp
1	31.10.20111	351	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
2	31.10.2011	351	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
1	7.11.2011	352	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
	24.11.2011	353	<u>Licenses</u>	.Updating the license for Ramat Negev Energy Ltd
1	5.12.2011	355	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
2	5.12.2011	355	<u>Licenses</u>	Extending the IEC's licenses
2	12.12.2011	356	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
1	19.12.2011	357	<u>Licenses</u>	Granting conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
1	4.1.2012	358	<u>Licenses</u>	Granting conditional licenses for the establishment of solar-thermal technology electricity production facilities connected to the transmission grid
2	4.1.2012	358	<u>Licenses</u>	Revising the permanent licenses given to the IEC's pro- duction units - the validity period of the licenses
3	4.1.2012	358	<u>Licenses</u>	Revising the electricity supply license for the Jerusalem District Electric Company



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1	29.4.2012	370	<u>Licenses</u>	Granting licenses for the establishment of solar technol- ogy electricity production facilities connected to the distribution grid	
3	4.6.2012	375	<u>Licenses</u>	Canceling the conditional license for the establishment of solar technology electricity production facilities con- nected to the distribution grid	
1	4.6.2012	375	<u>Licenses</u>	Granting a conditional license for the establishment of pumped energy technology facility to PSP Investments .Ltd	
2	25.6.2012	378	Licenses	Granting a distribution and supply licenses to Pituah .She'an Ltd	
4	25.6.2012	378	<u>Licenses</u>	Granting a permanent license for the establishment of cogeneration technology facility to Sugat Sugar Refin- eries Ltd and Dor Alon partnership from the Energy Gat centers, Lp	
5	25.6.2012	378	Licenses	Updating the license for Tahal Water Energy Group Ltd - Belvoir Fortress	
6	25.6.2012	378	<u>Licenses</u>	Granting a conditional license for the establishment of a renewable energy technology electricity production facilities connected to the distribution grid	
7	25.6.2012	378	<u>Licenses</u>	censes .Updating the license for Etgal Ashdod Ltd	
1	30.7.2012	380	<u>Licenses</u>		
2	30.7.2012	380	<u>Licenses</u>	Granting conditional licenses for the establishment of a photovoltaic technology electricity production facilities connected to the transmission grid	
з	30.7.2012	380	<u>Licenses</u>	Updating conditional licenses for the establishment of a solar technology electricity production facilities connected to the distribution grid	
4	30.7.2012	380	<u>Licenses</u>	.Updating the license for Zomet Energy Ltd	
5	30.7.2012	380	<u>Licenses</u>	Granting a conditional license for the establishment of a electricity production facility (cogeneration) for Ad- Ltd Energy Integrated vanced	
1	6.8.2012	381	<u>Licenses</u>	.Updating the license for IPP Delek Sorek Ltd	
2	6.8.2012	381	Licenses	.Updating the license for Dalia Power Energies Ltd	
1	5.9.2012	383	<u>Licenses</u>	Revising licenses (revised) (new) for Dalia Power Ener- .gies Ltd	
1	10.9.2012	384	<u>Licenses</u>	Revising conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid	



				Canceling the conditional license for the establishment
2	10.9.2012	384	<u>Licenses</u>	of solar technology electricity production facilities con- nected to the distribution grid
3	10.9.2012	384	<u>Licenses</u>	Revising the conditional license for the establishment of solar technology electricity production facilities con- nected to the transmission grid
4	10.9.2012	384	<u>Licenses</u>	.Updating the license for IPM Beer Tuvia Ltd
1	5.11.2012	386	<u>Licenses</u>	Revising the conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
2	5.11.2012	386	<u>Licenses</u>	Revising the conditional license for the establishment of solar technology electricity production facilities con- nected to the transmission grid
1	26.11.2012	387	<u>Licenses</u>	Revising the conditional license for the establishment of solar technology electricity production facilities con- nected to the distribution grid
2	26.11.2012	387	<u>Licenses</u>	Revising the conditional license for the establishment of a photovoltaic technology electricity production facility connected to the distribution grid - land tender
3	26.11.2012	387	<u>Licenses</u>	Granting a conditional license for the establishment of renewable energy technology electricity production facility connected to the distribution grid
4	26.11.2012	387	<u>Licenses</u>	Granting permanent licenses for the establishment of solar technology electricity production facilities connected to the distribution grid
5	26.11.2012	387	<u>Licenses</u>	Rejecting requests to extend the milestones for the conditional licenses for the establishment of solar tech- nology electricity production facilities connected to the distribution grid after financial closing
6	26.11.2012	387	<u>Licenses</u>	Revising licenses (revised) (new) for Dalia Power Ener- .gies Ltd
1	25.12.2012	389	<u>Licenses</u>	Revising conditional licenses for the establishment of solar technology electricity production facilities con- nected to the distribution grid
2	25.12.2012	389	<u>Licenses</u>	Updating the license for Tahal Water Energy Group Ltd - Belvoir Fortress
3	25.12.2012	389	<u>Licenses</u>	Granting a conditional license for the establishment of a renewable energy technology electricity production facility connected to the distribution grid
4	25.12.2012	389	<u>Dorad</u>	Reducing guarantee in the conditional licenses for Do- .rad Energy Ltd



5	25.12.2012	389	<u>Licenses</u>	Canceling the conditional license for the establishment of a solar technology electricity production facility con- nected to the distribution grid
7	25.12.2012	389	<u>Licenses</u>	Revising the conditional and permanent licenses for the establishment of a thermo solar technology electric- ity production facility - for the winner of the Ashelim tender no. STB0309
1	31.12.2012	390	<u>Licenses</u>	Revising the permanent licenses given to the IEC's production units - revising clause 4(a) - validity period of the license
2	14.11.2011	353	<u>Private</u> <u>electricity</u> <u>suppliers</u>	Pre ruling - Askolot Gat

# Decisions regarding regulations and tariffs - renewable energies

2	24.1.2011	325	Thermo solar	Updating the regulation for electricity produc- tion facilities with production licenses con- nected to the transmission grid using solar technology
3	24.1.2011	325	Thermo solar	Updating the tariff sheet for electricity produc- tion facilities connected to the transmission grid using solar technology
1	7.2.2011	326	Regulation	Establishing solar facilities over 50 KW con- nected to the distribution grid through land tenders on behalf of the Israel Land Institute
з	7.2.2011	326	Land tenders	Quantity addition to the land tenders on behalf of the Israel Land Institute
2	25.7.2011	344	tariffs	Determining the tariff and regulation for biogas electricity production facilities in anaerobic digestion facilities
3	25.7.2011	344	regulation	Updating the regulation for production license holders connected to the transmission grid through solar technology
4	25.7.2011	344	Tariffs	Updating the tariff sheet for electricity produc- tion facilities connected to the transmission grid using solar technology
5	25.7.2011	344	Tariffs	Tariff update formula
18	8.8.2011	346	Tariffs	Determining the tariff for the establishment of solar facilities over 50 KW through land tenders on behalf of the Israel Land Institute



2	29.8.2011	347	Regulation	Updating the regulation for electricity produc- tion facilities with production licenses connect- ed to the transmission grid using non thermo solar technologies
1	10.10.2011	349	Tariffs	Determining the tariff and regulation to a wind farm with a power over 50 KW
1	12.12.2011	356A	tariff	tariff sheet for electricity production facilities connected to the distribution grid using solar technology
2	13.2.2012	2 362 Regulation		Tariff regulation regarding decentralized electricity production for self consumption and transferring surpluses to the grid using a photovoltaic system with a power of no more than 50 KW
1	4.6.2012	375	Regulation	Tariff regulation for 2014, regarding decentral- ized electricity production for self consumption and transferring surpluses to the grid using a photovoltaic system with a power of no more than 50 KW for electricity production in the summer of 2012
1	15.10.2012 385		tariffs	Updating the tariff sheet for electricity produc- tion facilities connected to the transmission grid using photovoltaic technologies (including land (tenders in the transmission grid
6	25.12.2012	389	Criteria	Updating and changing criterion no. 194 "con- necting a wind farm and a solar facility onto the same land division" small clause (a) "conditions for connecting two facilities onto the same land "division
8	25.12.2012	389	Land tenders	Updating the tariff for solar facilities of over 50 MW connected to the distribution grid, in land tenders on behalf of the Israel Land Institute
9	25.12.2012	389	Photovoltaic	Continuing tariff regulation regarding electricity consumption and production using home and business photovoltaic systems which are not higher than 50 KW
10	25.12.2012	389	Net metering	Regulation for decentralized electricity pro- duction with renewable energy using the net metering method



# Decisions regarding tariff updates - essential service provider

2+3	14.3.2011	329	Yearly update	Yearly update 2010 - compensation for failure to continuously update the electricity tariffs + summary of yearly update
1	28.3.2011	331	Tariffs	Updating the normative operation times of the produc- tion unit
1	16.5.2011	335	Yearly update	Updating payments for failure to comply with the criteria
2	16.5.2011	335	Yearly update	Updating payments for high voltage connection surveys
3	16.5.2011	335	Yearly update	Updating tariffs for connecting to the medium voltage grid
4	16.5.2011	335	Yearly update	Updating tariffs for connecting to the low voltage grid
5	16.5.2011	335	Yearly update	Tariffs for on account of others works
6	16.5.2011	335	Yearly update	Expanding the TOU to the consumers consuming more than 40,000 KWh per year
1	8.8.2011	346	Yearly update	Yearly update 2011 - updating the financing costs rec- ognized for the IEC
2	8.8.2011	346	Yearly update	Yearly update 2011 - the final fuel mix recognized for 2010 and the premises for its calculation
3	8.8.2011	346	Yearly update	Yearly update 2011 - the fuel mix pre-recognized for 2011 and the premises for its calculation
4	8.8.2011	346	Yearly update	Updating recognized assets (recognized cost of active assets) for 2011
5	8.8.2011	346	Yearly update	Yearly update 2011 - burying lines
6	8.8.2011	346	Yearly update	Yearly update 2011 - electricity procurement from private producers
7	8.8.2011	346	Yearly update	Yearly update 2011 - cost of premium arrangement for renewable energy producers
8	8.8.2011	346	Yearly update	Yearly update 2011 - electricity procurement with photovoltaic
9	8.8.2011	346	Yearly update	Yearly update 2011 - voluntary shedding using inde- pendent generators
10	8.8.2011	346	Yearly update	Yearly update 2011 - frequency shedding agreements
11	8.8.2011	346	Yearly update	Yearly update 2011 - cost return for voluntary shedding using a rolling peak arrangement



12	8.8.2011	346	Yearly update	Yearly update 2011 - return for social tariff
13	8.8.2011	346 Yearly update		Yearly update 2011 - compensation for a nonconsecu- tive update of the electricity tariffs
14	8.8.2011	346	Yearly update	
1	24.10.2011	350	Tariff	Current update of electricity tariffs
1	22.3.2012	367	Tariff	Distributing the tariff and a 8.9% rise
1	16.8.2012	382	Tariffs	Distributing the IEC's debt in order to prevent an elec- tricity shortage
1	11.4.2011	333	Tariffs	Connection tariffs for electricity facilities with a connec- tion size smaller than 25 ampere

# Decisions regarding consumer and supplier regulations for demand\ shortage management:

2	28.3.2011	331	Tariffs	Rolling peak
1	4.7.2011	341	Criterion	Criterion 46 "voluntary shedding using independent "generators and selling energy to the grid
3	12.12.2011	356	Generators	The Authority approves the expansion of the genera- tors' operation
2	30.1.2012	361	Simplifying TOU	Determining a simple TOU tariff for home electricity consumers
6	2.4.2012	368	tariffs	arrangement for reducing demands and im- 20/20 proving consumption for the 2012 summer
4	23.4.2012	369	generator	Revising criteria 43 and 46 and expending the inde- pendent generator arrangement's operation time for 2012
4	14.5.2012	372	Arrangement for summer drought	Extending the registration period for the 20/20 ar- rangement to reduce demands and improve con- sumption for the 2012 summer
1	28.5.2012	374	Criteria	Criterion for smart consumerism arrangement
2	4.6.2012	375	generators	Revising criterion 43 "voluntary shedding using inde- "pendent generators
3	25.6.2012	378	Private electricity suppliers	Integrating private electricity suppliers who are pro- duction license holders (hereinafter: "suppliers") for fear of an electricity shortage in the summer of 2012
	17.6.2012	379	Arrangement management	Changes and additions to the existing shortage man- agement arrangements - generators and rolling peak



1	28.6.2012	379a	Arrangement management	Extending the registration period for the 20/20 ar- rangement to reduce demands and improve con- sumption for the 2012 summer
1	16.7.2012	379	Arrangement management	Voluntary shedding for large electricity consumers
1	9.1.2013	392	Arrangement	Integrating private suppliers operating with non natural gas for winter 2013

# Decisions regarding Service Standards:

2	4.4.2011	332	Criteria	Changes and addition to the Service Standards	Changes and addition to the criteria
3	6.2.2012	362	Criteria	Changes to the Service Standards	Revising consumer criteria
1	17.1.2011	323	Completion of agreement	Service Standards	Criterion 17 d - regarding failure to perform, delays or limiting energy procurement, availability and ad- ditional services by an essential service provider

# Decisions regarding the East Jerusalem Electric Company:

1	29.8.2011	347	East Jerusalem Electric Company	Regular updates of the selling tariffs to the consumers of the East Jerusalem Electric Company
3	6.8.2012	381	East Jerusalem Electric Company	Cost return for social tariff for the East Jerusalem Electric Company
4	6.8.2012	381	East Jerusalem Electric Company	Electricity procurement tariff of the East Jerusalem Electric Company from the IEC

# Decisions regarding natural gas in the electricity field:

5	14.5.2012	372	Gas survey	Revising the gas survey criteria
1	14.6.2012	377	Gas agreement	Principles for recognizing the costs of the natu- ral gas procurement agreements 2012
2	6.6.2011	338	Gas	Referring to various issues in the suppliers' structure in the gas field and its affect on the electricity tariffs
3	5.11.2012	386	Gas	Updating decision 377



# Appendix 2: the Authority's public hearings during 2011-2012

- 15.1.2011 distributing the IEC's debt to the electricity consumers until 2025 in order to prevent an electricity shortage, establishing 3 more steam additions in Eshkol, Hagit and Ramat Hovav during the years 2013-2014.
- 2. 1.2.2011 determining the tariff and regulation for the wind farms connected to the distribution and transmission grids.
- 3. 7.2.2011 a TOU hearing for consumers with a homogeneous tariff consuming more than 40,000 KWh per year.
- 4. 6.3.2011 hearing: criterion 46: "voluntary shedding using independent generators and selling energy to the grid".
- 5. 6.3.2011 hearing: criterion and tariffs for high voltage connection.
- 6. 10.3.2011 hearing: criterion 47: encouraging early entrances by private production facilities into the system, summer 2013.
- 7. 25.6.2011 an account settling mechanism for regulating the legal activities of the historic electricity distributers.
- 8. 29.6.2011 changes in the criteria.
- 9. 25.7.2011 "updating the fuel cost for 2011 in the electricity tariff".
- 10. 9.8.2011 hearing: generic conditional license for the establishment of electricity production facilities using solar facilities with solar technologies connected to the transmission grid.
- 11. 11.8.2011 "determining a tariff regulation for photovoltaic facilities in the transmission grid".
- 12. 14.8.2011 hearing: the wording of the permanent generic license for electricity production facilities using solar facilities with photovoltaic technologies connected to the distribution grid.
- 13. 19.1.12 hearing: changes in criterion 1 definitions.
- 14. 12.2.12 hearing: distributing the electricity tariffs increase for 2012-2014 in light of the shortage in the natural gas supply to Israel.
- 15. 15.2.12 postponing the hearing on distributing the electricity tariffs increase for2012-2014 in light of the shortage in the natural gas supply to Israel.
- 16. 28.2.12 hearing: the criteria for consumer shedding at a shortage events.
- 17. 18.3.12 hearing: reducing demands and improving consumption for the 2012 summer.
- 18. 26.3.12 hearing: the Authority's decision to clarify the terms of a non duel fuel production activity in a state of a general shortage of natural gas supply.
- 19. 29.3.12 hearing: expending the independent generator arrangement for 2012.
- 20. 31.3.2012 revising the hearing on the continuation of the content of the decision regarding the criteria supporting financing.
- 21. 1.4.2012 revising the hearing on the continuation of the content of the decision regarding the criteria supporting financing.
- 22. 5.4.12 hearing: adding the senior debt sponsor as an owner of the corporation.
- 3.6.12 hearing: the continuation of the tariff regulation regarding decentralized electricity production for self consumption, and transferring surpluses to the grid using a photovoltaic system that does not exceed 50 KW for electricity production



for the summer of 2012.

- 24. 4.6.2012 hearing: the principles for recognizing costs for the 2012 gas agreement.
- 25. 11.6.12 hearing: expending the arrangements for consumption management in order to deal with an electricity shortage.
- 26. 8.7.12 hearing: criterion 47a "voluntary shedding arrangement for large consumers".
- 27. 31.7.12 hearing: determining tariffs and regulations for Haluts facilities for electricity production using renewable energy sources.
- 9.8.12 postponing the hearing regarding determining tariffs and regulations for Haluts facilities for electricity production using renewable energy sources.
- 29. 6.9.12 hearing: updating the tariff for solar facilities with photovoltaic technology, connected to the transmission grid.
- 25.10.12 hearing: updating the tariff for the establishment of solar facilities over
  50 KW connected to the distribution grid, using land tenders on behalf of the Israel
  Land Institute.
- 31. 1.11.12 hearing: net metering.
- 32. 20.12.12 hearing: changing and updating the criteria.
- 33. 18.12.12 hearing: regarding synchronization for conditional license holders.
- 34. 31.12.12 hearing: tariff for cogeneration facilities.



## Appendix 3 - consumer activity

459 complaints and 495 applications were submitted and dealt with in the department during 2011. 30% of the complaints were found to be justified (not including the photovoltaic issue, whose complaint amount grew this year by approx. 500%).

Home connections: 48% of the complaints were found to be justified; bills and payments: 41% of the complaints were found to be justified.

The IEC paid 147,083 NIS to consumers for failure to comply with various criteria, according to the criteria's instructions and relevant tariff sheet. The company paid approx. 3.4 million NIS for damages caused to electric appliances due to acquitting events that occurred in the grid, as set in the criteria.

3.7% of all of the complaints directed at the IEC are submitted to the company through associations that represent consumers and through the regulator, which is the Authority. 75% of the complaints were submitted to the company through the Authority's consumerism department. The department can provide explanations and clarifications to the state comptroller and to consumers' associations should it be required to do so, and the comptroller and the associations' votes are used for a principle examination of subjects and issues whom the public views as having a high priority.

In 2011, 70,000 bimonthly consumers were disconnected from the electricity supply due to accumulated consumption debt. There were 8,926 disconnection bypass actions (installing low voltage meters and a reduced fuse) this year, and the amount of sweeping disconnections was reduced by 10%. Compared to the previous year, there is a 1% decrease in using disconnection bypass means.

The consumption evaluation rate as a result of a lack of access (from the consumer's side) is at 5.2% of all the bills.

The amount of initiates meter skips has slightly decreased: 113% of the bills were based on an initiated skip (where the company does not send meter readers to the field and as result the consumption is evaluated and the bills are calculated according to that estimation). This is still a large amount of estimated bills, and accordingly, the department deals with a high complaint number.

The consumption evaluation issue is the main issue the Authority is examining regarding the amount of initiated skips performed by the company, this data is concerning, especially in light of the fact that it is in the hands of the company, and the company is the one deciding to act in this manner. In late 2011- early 2012, the Authority had been working towards determining criteria that address this issue:

- 1. The number of permitted skips was reduced from three times a year, to two.
- 2. Initiated skips will not be performed on consecutive bills.
- 3. A sanction has been determined, including a payment to be paid by the company, should the IEC break these rules.

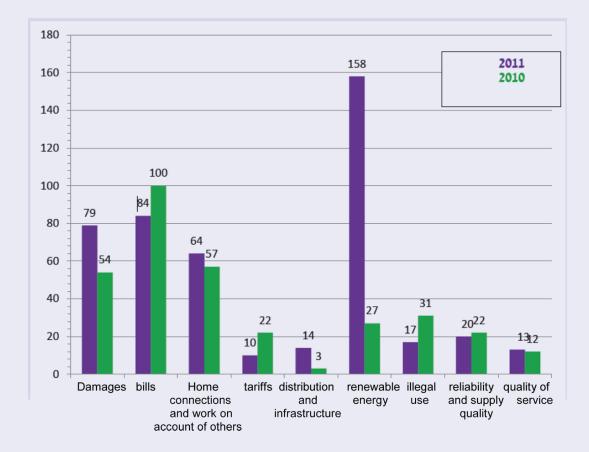


4. Receiving credit for not reading the meter.

Regarding public appeals, 2011 is characterized by a return to the appeal amount of 2009 and earlier.

Most of the appeals arrive via telephone or fax, but this year we have witnessed an increase in the appeals arriving through the Authority's website, which allows a quick and easy route directly to the department's electronic mail.

From January 2011 until December 2011, the Authority received 459 complaints from IEC's consumers.



### Number of complaints according to subject for 2011 compared to the previous year



Differentiating the complaints according to subjects allows us to learn about the individual disagreement points between the sides, while detecting the treatment towards them as part of the criteria and ruling on them accordingly.

The main complaint issues:

• Payments and bills - the criteria determined the service instructions regarding the way the bills will be submitted, its structure content, how the amount of KWh per consumption is determined, payment dates, bill revision, different type of bills for different types of consumers, etc. This year this subject also includes complaints regarding renewable energy bills.

We examine the complaints regarding these issues and learn how they are expressed in the supplier - consumer contractual activity.

• Home connection and work on account of others -complaints referring to issues regarding to building connections: method of connection, including these and other components in the supplier's work offered to the consumer, connection work execution times, connection bills submitted to the consumer, characteristics of the required connection work, etc. The work principles of the connections are specified in the criteria and the tariff sheets. Further issues in this matter are derived from the criterion "work on the account of others", which unlike "connections", are works that can be ordered from bodies outside of the company. They have different principles and different tariff sheets.

• Illegal use - illegal use of electricity as a result of intentional sabotage to an electricity facility of an essential service provider. These types of sabotages create inaccuracies in meter readings, and as a result also in the electricity bill, which will result in an evaluation the electricity bill will be based upon.

The criteria allow the supplier to operate in several ways in order to collect the deserved payment for the electricity consumption and for changing the defected meter.

The consumption evaluation method is also defined, and the relevant consumer can contact the public appeals' supervisor and request that the evaluation he was given be examined, providing that he went through the appropriate ranks who examine complaints in the essential service provider's offices.

• Tariffs - complaints regarding the components of the determined tariff, the rationale behind the tariff and the amount of the tariff.

• Damaged to electric appliances - consumers are more and more aware of the implications of the electricity supply's reliability and quality on their home appliances. Many consumers are being referred to the IEC by different professionals, in order to examine alleged damages and receive compensation.

The department examines these complaints according to the predetermined criteria which state that a consumer shall receive immediate compensation only in the event of a proven



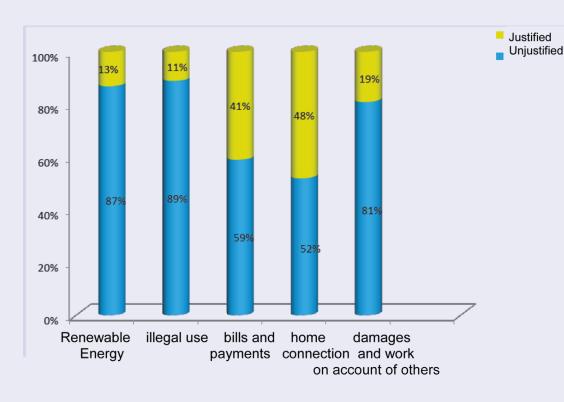
direct and actual damage.

• Distribution and infrastructure - expending the activity in the electricity sector allows the Authority to examine other electricity suppliers and distributors, operating in defined distribution areas, and the consumer groups receiving their services.

In recent years, the Authority has been expanding its activity from the policy aspect, and the market's awakening is expressed by complaints from distributers, who are IEC's consumers, and from consumers receiving electricity supply from distribution license holders.

• Renewable energies - the criteria determined by the Authority in the field of green energy (producing electricity from the sun, wind energy, etc.) has opened up a new market in Israel; creating the tariff and consumer regulations required building new interfaces between the essential service provider and the consumers, and the number of complaints submitted to the Authority in this field is growing and developing according to the number of new interfaces, mostly due to the fact that the regulation is relatively new, and more time is needed for its assimilation and adaptation of the various systems.

#### Justified complaints according to subjects:



11% of the complaints regarding illegal use were found justified (16% in the previous year). 19% of the complaints regarding damages during 2011 were found justified (18% in the previous year). The complaints are examined based on the centered report's data, which presents a complex picture of the electric event to which the damage is associated with, including voltage and current data, supply reliability criteria and the number of distributers. 41% of the complaints regarding bills and payments during 2011 were found justified (34% in the previous year). Most complaints refer to the billing interaction between the company and its consumers, interest charges, fixed payments and renewable energy payments. 48% of the complaints regarding home connections and work on account of others during 2011 were found justified (44% in the previous year). Most complaints refer to the manner in which the connections were done and how they are priced according to the tariff sheets published by the Authority.

Most of the complaints the Authority dealt with over the last year concerned renewable energy, in light of the new regulations determined by the Authority regarding the photovoltaic issue to home consumers and the 50 KW systems for general tariff consumers<sup>\*</sup>.

As is often the case with new regulations, some issues had to be resolved by thinking both about the policy aspect and the content of the entire regulation. 13% of the complaints were found justified (37% in the previous year).

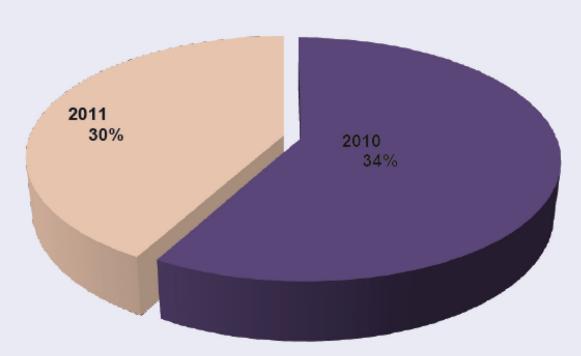
\*there is an unusual increase of 500% in the amount of complaints compared to last year,



and for that reason the data item "renewable energy" has been taken out of the database of all of the justified complaints, in order to prevent a distortion in the data presentation.

Comparing the different means over the years can be used to educate us and teach us important lessons on how to handle complaints: the subject of the complaints and appeals teach us about the affect of the criteria in the various services scope provided by the IEC to its consumers, and the time period until they are resolved teaches us about the way different work procedures are assimilated and developed in the department and with the essential service provider.

During 2011, the amount of complaints submitted to the Authority grew by 39%; the rate of the complex complaints is 9% out of the total complaints handled by the Authority, compared to 2010, when the department dealt with 11% complex cases. 4% of the complaints handled in 2011 were later reopened (10% in 2010). 83% of those were objections to the ----- decisions, examined by the Authority and found to meet the criteria (10% in 2010). 5% of the reopened complaints were found justified after the Authority's reexamination (28% in 2010).



Justified complaints

30.5% of the complaints we dealt with were defined as justified. Compared to 2010, there was a decline in the amount of complaints found justified after the Authority dealt with them. This data does not include the number of complaints regarding the photovoltaic field.



The social tariff

The Electricity Sector Law determined restrictions on the non subsidization principle, and laid the foundations for providing discounts to the electricity tariff with a limited payment scope, of 1.5% of the company's income.

The minister of Energy and Water Resources approved the regulations that define the populations groups eligible to receive tariff discount, and by the end of 2011, senior citizens who are eligible for old age pension and income support and people who are eligible for disability pensions, according to the national insurance, were also defined as eligible for the discount. In addition, holocaust survivors, defined as such by the Holocaust Survivors Authority, are also eligible for the discount. In 2012, the discount population was expended by a present need, and the group now includes additional handicapped groups and single parent families with a defined number of children.

In 2011, 141,665 eligible senior citizens utilized their discount, out of approx. 180,000 eligible citizens, according to the national insurance registry.

The senior citizen office founded a special project whose goal is to locate the remaining eligible citizens who are not yet utilizing their eligibility, and they are currently vigorously working towards locating the rest of them and informing them of the discount.

Among the holocaust survivors, there are approx. 8,000 eligible consumers, and in 2011, 6,731 of them utilized their right for the discount.

Among the disability pension population, the third group eligible for the discount, 15,875 of them have already utilized their eligibility.

The total cost of the tariff discounts to these groups was 121,627 million NIS during 2011; 1.5% of the company's incomes translate into a 300 million NIS discount. Accordingly, more eligible groups were added to the Electricity Sector Law in 2012.



## Appendix 4: 2011-2012 Service Standards (decision no. 2, meeting 332, 4.4.2011)

- a. Adding new criterion no. 7b call center. This criterion regulates the 103 call center's activity with the IEC. It determines the issues the center will handle, its operation hours, response time, as well as the center's operation during unusual busy hours.
- b. Criterion 13 the amount of initiated skips was minimized from 3 per year, to two per year, in nonconsecutive bills.
- c. Criterion 14 an evaluation model that allows submitting bills based on the average consumption rate of a consumer at a 150% scope in case a consumer prevents the access to the meter.
- d. Criterion 15 instructions to issue an early notice regarding a planned meter removal from the consumerism' location in order to allow the consumer to stay in that location for as long as he wishes to.
- e. Criterion 19 clarifying that a consumer replacement action shall be performed simultaneously with the essential service provider's confirmation that the consumer does not owe any payments so that both parties exchanging the meter registration can provide an acceptable notice time. The criterion emphasizes the responsibility of all sides to pay their bills.
- f. Criterion 20 an instruction that states that every new consumer shall receive a written certificate specifying that he is registered to the supplier's offices simultaneously with registering his name to the electricity meter.
- g. Criterion 21 an instruction stating that an early notice shall be given regarding any change in the tariff, no later than 15 days prior to the beginning of the new tariff.
- h. Criterion 25 an instruction stating that a standing order shall be charged on fixed dates, similar to those of credit card charges, according to the consumer's choice.
- i. Criterion 30 expanding the issue of the institutes responsible for the interface with the essential service provider for the different eligible groups.
- j. Criterion 34 an instruction stating that a consumer who reported a malfunction in the electric facility to the 103 call center, and is required to call a private electrician while the fault is with the IEC's facility, shall receive credit for the cost of calling the electrician and for the time spent without electricity (under criterion 34 regarding arrival times).
- k. Criterion 37 a sanction stating that in cases where the essential service provider did not provide notice regarding an initiated blackout, the consumer shall be compensated.
- l. Criterion 48 the malfunction operation criterion was clarified on the matter of the number of repeating connection made without damaging the appliance.
- m. A sanction stating that in a case where the electricity was unintentionally disconnected (according to the relevant criteria), the essential service provider shall compensate the consumer.



# Appendix 5 - The Authority's activities - licensing and supervision according to production technologies

This activity is expressed by three levels, as following:

- Regulatory activity for determining and controlling business procedures and criteria, expressed by the Authority's decisions and different regulations.
- Active examination of permanent and conditional license requests, for all voltage levels, powers and technologies, until a recommendation is made to the assembly to grant the licenses to those who meet the relevant regulations' instructions.
- Supervision of the compliance with the terms of the conditional license holders, according to the terms of their license. Supervision will also apply to permanent license holders regarding their production activities, supply and distribution, according to the terms of their license and the law.

1. Determining generic licenses - approved by the assembly and the minister, after coordination with the professional team at the Ministry of Water and Energy Resources

- Determining a generic license version for a supply license for a production license holder, for an OPC production license holder, for an essential service provider with a distribution licenses and a supply license to the dealer.
- b. Determining a (conditional) license version for the establishment of renewable energy production facilities connected to the distribution grid (medium photovoltaic regulation).
- c. Determining a (conditional) generic license version for the establishment of renewable energy production facilities connected to the solar - thermo \ photovoltaic transmission grid (large solar regulation).
- d. Determining a generic version for a permanent production license for photovoltaic facilities connected to the solar thermo distribution grid (medium).
- e. Determining a (conditional) license version for a cogeneration facility without a procurement obligation.
- f. Determining a (conditional) generic license for renewable energy electricity production using biogas technology.
- g. Determining a permanent generic license for renewable energy electricity production using biogas technology.
- Determining a (conditional) generic license for renewable energy electricity production using hydroelectric technology - after coordination with the office in preparation for the assembly's approval.
- i. Determining a generic license version for a distribution license.
- j. Working to determine conditional licenses and renewable energy production licenses for Haluts facilities.
- k. Working to determine a supply license for charging electric cars.
- I. Working to determine a permanent production license in biogas renewable energy from waste landfills.



- 1. Conditional licenses for renewable energy production facilities
- a. Examining requests for conditional photovoltaic licenses connected to the distribution grid (medium regulation).
  - 1. Determining internal criteria for managing the license request examination.
  - 2. Establishing an inter-departmental team for examining the requests. The team consists of an electrical engineer, a lawyer, a ----, an accountant and the teams coordinator.

Approx. 800 conditional license requests have been examined as part of this activity, with a general power of 1,500 MW, with low and medium voltage.

- Examining 14 requests which are part of the photovoltaic land tenders connected to the distribution grid: the inter- office team participated in the issue of land tenders, granting three conditional licenses and tariff permits to the tender's winners.
- c. Granting 430 photovoltaic conditional licenses, connected to the distribution grid (medium regulation).
- Examining the conditional license holders according to the milestones of their license. 184 requests for a conditional tariff approval were examined, 154 of which were found to be in order, with a total power of 270 MW.
- Examining 153 financial closings requests, providing closing permits to 140 requests. Rejecting 12 requests, with a general power of 31MW, with one project is yet to reach the financial closing date.

f. Granting 11 permanent production licenses to photovoltaic technology facilities connected to the distribution grid (medium regulation), total power - 10 MW.

- Granting 2 permanent production licenses for biogas technology, total power - 4 MW, connected to the distribution grid, to Eco Energy Golan and Tambur Hefer companies.
- 4. Granting 3 conditional hydroelectric technology licenses.
- 5. Granting 2 conditional landfill licenses, and one anaerobic biogas technology license.
- 6. Granting 2 conditional wind energy electricity production facility licenses, of 8 MW and 9.4 MW. These licenses will be granted according to the regulation and the new feeding tariff, recently approved by the assembly.
- 7. Solar electricity production facilities (photovoltaic and thermo solar) connected to the transmission grid (large solar regulation).
  - a. Granting 16 conditional licenses for the establishment of a photovoltaic power station with a total power of 751 MW - in its final stages before requesting the minister and the assembly's approval.
  - b. Granting tariff approvals to 4 bodies, with a power of 182 MW, with the limit being 200 MW.
  - c. Granting 2 thermo solar licenses, with a total power of 180 MW.



- 8. Cogeneration:
  - a. Granting 6 licenses for the establishment of cogeneration power stations
    to: Ashdod Oil Refinery, The Dead Sea Works, Alon energy Centers, Solad,
    Nilit and renewable energies, for a total power of 699.8 MW.
  - b. Granting tariff approval to Ramat Negev Energy and Ashdod Energy, for a total power of 180 MW.
  - c. Examining financial closing requests by Ramat Negev Energy and Ashdod Energy, and granting the closing permit for these companies.
  - Changes in licensing and extending the milestones: Ashdod Energy
    ,Ramat Negev, Alon Tavor, Nilit, IPP Delek Alon Tavor, Tahal Pumped
    Storage and Belvoir Fortress.
  - e. Granting a permanent license to the Sugat Sugar Refineries Ltd, 9.5 MW.
- 9. Conventional:
- a. License requests Palmachim.
- b. License changes Zomet Energy, IPP Sorek, IPM request to extend and change ownership, Tahal Water Energy and Belvoir Fortress extending milestones.
- c. Granting a conditional pumped storage technology license to PSP Investments Ltd. Ma'ale Gilboa, 300 MW.
- d. Granting tariff approvals to the Dalia Company, 860 MW.
- e. Examining Dalia's financial closing request and granting approval.

Production licenses for the IEC's units:

- a. 7 production units.
- b. Closing for combined cycle Haifa 4.
- c. License for combined cycle Haifa 3.
- d. Revising licenses (12) by adding clause no. 10.

Distribution:

- a. A distribution license to the East Jerusalem Electric Company 400 MW.
- b. Examining 74 requests to join the layout.
- c. Granting 64 distributer layout permits.
- d. Examining 6 distribution license requests.

<u>Supply</u>:

- a. Revising and extending the East Jerusalem Electricity Company's license.
- b. Accompanying the entrepreneurs in preparation for receiving separate supply licenses from a dealer supplier, a producer supplier and a distribution license holder supplier.
- c. Supply license for charging electric cars.



Appendix 6: Conditional Licenses Holders Connected To The Distribution Grid 2011-2012 Conditional License For the Establishment of Solar Facilities To The Distribution Grid And Permanent Production Licenses Status -As Of 21.06.2012 Connected

License Conditional License Holder's Name ID License No. MW Status Valid Ketura Sun, Lp 1 0051-4-01-2008 4.95 Valid Industrial Buildings Corporation Ltd. - Karmiel 2 0.52 0341-4-04-2010 Valid Industrial Buildings Corporation Ltd. (23 Kanot) 3 0342-4-01-2010 0.335 Valid Sunshine Renewable Energy One Ltd 4 0271-4-01-2010 0.5 Valid Sunshine Renewable Energy Two Ltd 5 0343-4-01-2010 0.625 Valid Big Shopping Centers (2004) Ltd. - Beit Shemesh 6 0287-4-03-2010 0.63 Valid Big Shopping Centers (2004) Ltd. - Tiberias 7 0286-4-04-2010 0.63 8 Valid 0.63 Topap Industries Ltd. 0040-4-01-2010 Valid 9 Super Solar Projects 2 Ltd. 0313-4-01-2010 0.625 Valid Paz Solar - Sde Boker Project Ltd. שיכון ובינוי אנרגיה סולאר 10 0384-4-01-2010 5 בע״מ - שדה בוקר Valid Hayal Properties - Teradion 0387-4-03-2010 0.3 11 Valid 12 Hayal Properties - Alon Tavor 0386-4-04-2010 0.629 Valid 13 0.63 **Big Shopping Centers - Karmiel** 0147-4-04-2010 Valid Big Shopping Centers - Kiryat Gat 14 0148-4-01-2010 0.63 Valid The Company For Beerot Izhak Land Development Ltd. 15 0408-4-01-2010 0.38 Valid Industrial Buildings Corporation Ltd. - Ramle 16 0407-4-01-2010 0.161 Valid 17 0.34 Industrial Buildings Corporation Ltd. - Ashdod 0410-4-01-2010 0437-4-04-2010 Valid Sahar Investment - Ramat Magshimim 18 0.63 Valid Havat Shikmim, No.20 19 0215-4-01-2010 0.63 Valid 20 0.63 Havat Shikmim, No.27 0243-4-01-2010 Valid **Meir Zion Holdings** 21 0274-4-01-2010 0.575 Valid Amot Energy - Karmiel 22 0486-4-04-2010 0.215 Valid Shlomovich Farm Ltd. 23 0336-4-01-2010 0.63 Valid Enlight - Light Falls (Formerly Sahar Investment) - Moshav 24 0481-4-04-2010 0.63 Yonatan Valid Photovoltech 25 0272-4-01-2010 0.437 Valid Sunshine 3 Nir Etzion 26 1.5 0480-4-03-2010 Valid A.D. A.F. Ltd. 27 0273-4-04-2010 0.6 Valid Zabar Solar Ltd. - Beit Nehemia 28 0421-4-01-2010 0.3 Valid Zabar Solar Ltd. - Moshav Bitha (Hadar) 29 0485-4-01-2010 0.567 Valid Zabar Solar Ltd. - Mishmar Ayalon (Court 7) 30 0484-4-03-2010 0.414



Valid	Zabar Solar Ltd Moshav Bitha (Tzor)	31	0483-4-01-2010	0.58
Valid	Zabar Solar Ltd Mishmar Ayalon (Court 15)	32	0482-4-03-2010	0.63
Valid	Solarit Doral (Ayelet Hashahar) Ltd.	33	0270-4-04-2010	0.6
Valid	Solarit Doral (Kfar Haruv) Ltd.	34	0312-4-04-2010	0.6
Valid	Solarit Doral (Kibutz Gezer) Ltd.	35	0412-4-01-2010	0.5
Valid	Sunshine 7 - Kfar Warburg	36	0527-4-01-2010	0.35
Valid	Sunshine Five Ltd Timorim	37	0491-4-01-2010	0.625
Valid	Paz Solar - Ein Hashlosha שיכון ובינוי אנרגיה סולאר בע״מ - עין השלושה	38	0498-4-01-2010	5
Valid	Paz Solar Ltd Goren Park	39	0521-4-04-2010	2.5
Valid	Paz Solar Ltd Netivot	40	0494-4-01-2010	0.61
Valid	Paz Solar Ltd Hatzerim שיכון ובינוי אנריגה סולאר בע״מ - חצרים	41	0499-4-01-2010	6
Valid	Melisron	42	0496-4-04-2010	0.77
Valid	Hutzot Hamifratz	43	0497-4-06-2010	0.6
Valid	Ofer Raanana Properties Ltd.	44	0495-4-02-2010	0.4
Valid	Shmey-Bar (I.A.) Ltd.	45	0503-4-04-2010	1.4
Valid	Big Shopping Centers -Qastina	46	0501-4-01-2010	0.56
Valid	Super Solar Projects - Migdal Haemek	47	0523-4-04-2010	0.55
Valid	Super Solar Projects 4 - Yavne	48	0522-4-01-2010	0.45
Valid	B.S.E - Maagan	49	0542-4-04-2010	3
Valid	B.S.E - Ein Harod	50	0543-4-04-2010	2.9
Valid	Karni Dimona	51	0541-4-01-2010	2.94
Valid	Brand Industries	52	0214-4-01-2010	0.565
Valid	Paz Solar - Hadar Am שיכון ובינוי אנרגיה סולאר בע״מ - הדר עם	53	0547-4-02-2010	0.325
Valid	Amot Energy - Best Carton	54	0565-4-04-2010	1.512
Valid	Magash Noi Agencies Ltd.	55	0500-4-04-2010	2
Valid	Enlight -Gazit	56	0549-4-04-2010	0.55
Valid	Urim Green Energies Ltd.	57	0263-4-01-2010	10
Valid	Carmi Farm	58	0505-4-02-2010	0.188
Valid	Mivtahim Green Energies	59	0268-4-01-2010	10
Valid	Talmei Bilu Green Energies	60	0264-4-04-2010	10
Valid	Super Solar 1 - Lapidot	61	0548-4-04-2010	0.532
Valid	Solarit Doral - Alumim	62	0415-4-01-2010	0.6
Valid	Solarit Doral - Gevaram	63	0220-4-01-2010	0.35
Valid	Whole Sol	64	0331-4-01-2010	0.36
Valid	Shikun Binui Ltd Kfar Yedidia	65	0545-4-02-2010	0.5
Valid	Dalkia Energy & Services- Samar	66	0578-4-01-2010	10.8
Valid	Dalkia Energy & Services- Gevulot	67	0582-4-01-2010	8.5
Valid	Dalkia Energy & Services- Miflasim	68	0584-4-01-2010	10.8
Valid	Super Solar Projects 9	69	0567-4-01-2010	0.625
Valid	Super Solar Projects 10	70	0566-4-01-2010	0.2
Valid	M.P.E.F.W. Solar Lp	71	0570-4-04-2010	0.625



Valid	M.P.E.F.W. Solar Lp	72	0569-4-04-2010	בוטל
Valid	M.P.E.F.W. Solar Lp	73	0568-4-04-2010	0.625
Valid	Be'erot Yitzhak Renewable Energy Ltd.	74	0560-4-01-2010	0.6
Valid	Ein Hanatziv Renewable Energy Ltd.	75	0562-4-04-2010	0.6
Valid	Quality Furniture Ovnish Shalom Ltd.	76	0561-4-01-2010	0.373
Valid	Refet H.C.D Solarit	77	0244-4-04-2010	0.5
Valid	Givat Haim (Meuhad) Solarit Doral Ltd.	78	0370-4-04-2010	0.6
Valid	Ein Gev Solarit Doral 2010 Ltd.	79	0590-4-01-2010	0.535
Valid	Bet Alfa Riot Control Technologies 2001 Ltd.	80	0588-4-04-2010	0.63
Valid	Paz Solar Ltd Peri שיכון ובינוי אנרגיה סולאר בע״מ - פרי	81	0608-4-01-2010	0.531
Valid	Paz Solar Ltd Strauss Yosef Solar	82	0598-4-01-2010	0.629
Valid	Paz Solar Ltd Yishay שיכון ובינוי אנרגיה סולאר בע״מ - ישי	83	0609-4-01-2010	0.503
Valid	S.D. Solar Synergy - Samar	84	0367-4-01-2010	0.45
Valid	Solarit Yotveta Partnership	85	0369-4-01-2010	0.35
Valid	Enlight - Kramim אשכול - אלה, כרמים אנלייט, שותפות מוגבלת	86	0579-4-01-2010	5
Valid	Paz Solar Ltd Nirim	87	0610-4-01-2010	0.2
Valid	Yoav Zur Energy Ltd.	88	0524-4-01-2010	0.6
Valid	Solarotem Ltd.	89	0559-4-01-2010	0.45
Valid	Dikla Arad Ltd.	90	0615-4-01-2010	0.404
Valid	Hadasstops Ltd.	91	0620-4-04-2010	0.63
Valid	Industrial Buildings Corporation Ltd.	92	0335-4-01-2010	0.363
Valid	A.M.N Solar Systems & Green Energy Ltd.	93	0133-4-04-2010	0.6
Valid	Sunshine Energies 6- Pinchas Cohen	94	0526-4-01-2010	בוטל
Valid	Sunshine Energies 6 - Michael Pnina Cohen	95	0525-4-01-2010	בוטל
Valid	Dalkia Energy - Kibutz Lahav	96	0624-4-01-2010	3.2
Valid	Dalkia Energy - Nachal Oz	97	0626-4-01-2010	6
Valid	Aran Sol G.C 7 Lp.	98	0614-4-04-2010	0.515
Valid	Aran Sol A.S 8 Lp.	99	0613-4-04-2010	0.43
Valid	Icg Solar Ltd.	100	0563-4-04-2010	1.2
Valid	Icg Solar Ltd.	101	0564-4-04-2010	1.1
Valid	Reut Renewable Energy Ltd.	102	0616-4-04-2010	0.63
Valid	Magor Holding Ltd Moviley Dror	103	0635-4-04-2010	0.577
Valid	Magor Holding Ltd Palad	104	0636-4-04-2010	0.445
Valid	Timna Cliffs Ltd.	105	0640-4-01-2010	6
Valid	Fishman Propperties Ltd.	106	0504-4-04-2010	0.52
Valid	Solarit Tel Katzir	107	0368-4-04-2010	0.55
Valid	Tefen Refet Solarit Doral - Kibutz Toval	108	0414-4-04-2010	0.6
Valid	Granot Amot Anergy Solar Projects, Lp - Ambar South	109	0644-4-01-2010	0.63
Valid	Energix - Renewable Energies Ltd Ma'alot-Tarshiha	110	0643-4-04-2010	0.2691
Valid	Sunshine Renewable Energies Nine - Bnei Darom	112	0627-4-01-2010	0.625
Valid	Paz Solar Ltd Magal Hava A - שיכון ובינוי אנרגיה סולאר בע״מ	113	0664-4-06-2010	0.586
	מגל א			



Valid	Paz Solar Ltd Magal Hava C - שיכון ובינוי אנרגיה סולאר בע״מ מגל ג	114	0663-4-06-2010	0.564
Valid	Ogen Yielding Real Estate Ltd.	115	0611-4-02-2010	0.216
Valid	Sela Energies Tavor 2010 Ltd.	116	0670-4-04-2010	0.547
Valid	Sela Energies Tavor 2010 Ltd.	117	0668-4-04-2010	0.613
Valid	Sela Energies Tavor 2010 Ltd.	118	0669-4-04-2010	0.506
Valid	סאנשיין אנרגיות מתחדשות 11 Ltd 11 סאנשיין אנרגיות מתחדשות	119	0667-4-04-2010	בוטל
Valid	Sela Energies Tavor 2010 Ltd Tnuvot Sofer	120	0695-4-04-2010	0.23
Valid	Sela Energies Tavor 2010 Ltd Tnuvot Mifal	121	0671-4-04-2010	0.423
Valid	Talmey Eliyahu Green Energies Ltd.	122	0265-4-01-2010	10
Valid	Shikun Binui Renewable Energy Ltd.	123	0666-4-01-2010	0.44
Valid	Shikun Binui Renewable Energy Ltd.	124	0665-4-01-2010	0.43
Valid	Klir Chemicals - Manufacturing And Marketing Ltd.	125	0637-4-01-2010	0.55
Valid	Fishman Cooling Enterprises Ltd. (East)	126	0236-4-04-2010	0.48
Valid	Fishman Cooling Enterprises Ltd. (West)	127	0235-4-04-2010	0.51
Valid	Sunshine Renewable Energies 10 Ltd.	128	0703-4-04-2010	0.3
Valid	Sunshine Renewable Energies 12 Ltd.	129	0704-4-01-2010	0.625
Valid	Elad Alternative Power Ltd. 1	130	0709-4-01-2010	בוטל
Valid	Elad Alternative Power Ltd. 2	131	0710-4-01-2010	בוטל
Valid	Zeron Solarit Doral Ltd.	132	0366-4-02-2010	0.55
Valid	Super Solar Projects 11 Ltd.	133	0705-4-04-2010	0.63
Valid	S. Schneider Investments Ltd.	134	0702-4-04-2010	0.5
Valid	Reut Renewable Energy Ltd Michael Farm	135	0691-4-01-2010	1.5
Valid	Reut Renewable Energy Ltd Itzik Farm	136	0694-4-01-2010	1.5
Valid	Elad Alternative Power Ltd Farm Bat Sheva	137	0687-4-01-2010	0.55
Valid	Elad Alternative Power - Dubani Farm	138	0688-4-01-2010	1.639
Valid	Elad Alternative Power LtdDaviv Farm	139	0689-4-01-2010	0.5
Valid	Elad Alternative Power Ltd Rachel Farm		0690-4-01-2010	1.682
Valid	Reut Renewable Energy LtdAshalim Farm 1	141	0706-4-01-2010	1.294
Valid	Reut Renewable Energy LtdAshalim Farm 2	142	0707-4-01-2010	1.294
Valid	Reut Renewable Energy LtdAshalim Farm 3	143	0708-4-01-2010	1.294
Valid	Kerem Shalom Sun, Lp	144	0123-4-01-2010	6.4
Valid	Grofit Sun, Lp	145	0725-4-01-2010	6.4
Valid	Elifaz Sun, Lp	146	0727-4-01-2010	7
Valid	Shoval Sun, Lp	147	0804-4-01-2010	6.4
Valid	P.S.A 1 Ltd.	148	0722-4-01-2010	2.5
Valid	Yotvata Sun Lp	149	0780-4-01-2010	6.8
Valid	Maslul Sun Lp	150	0781-4-01-2010	8.9
Valid	Erez Sun, Lp	151	0805-4-01-2010	0.45
Valid	Ergasol Project 1 Ltd. Formerly Phoebus Reif 1 Ltd.	152	0642-4-01-2010	0.475
Valid	Zabar Solarpower Investments Ltd.	153	0685-4-01-2010	0.63
Valid	Zabar Solarpower Investments Ltd.	154	0686-4-01-2010	0.4



Valid	S.Y. Solar Energy, Ltd.	155	0645-4-02-2010	0.45
Valid	Granot Amot Anergy Solar Projects, Lp	156	0718-4-01-2010	0.63
Valid	Super Solar Projects 8 Ltd.	157	0806-4-04-2010	2
Valid	Metzar Settlement Lp	158	0795-4-04-2010	0.5
Valid	T-Bone Vil Holdings Ltd.	159	0989-4-01-2010	0.629
Valid	Super Solar Projects 7 Ltd.	160	0809-1-01-2010	0.392
Valid	Sun Team Ltd.	161	0377-4-03-2010	0.34
Valid	Sun Team Ltd.	162	0684-4-04-2010	0.6
Valid	Kinneret Solarit Doral Ltd.	163	0219-4-04-2010	0.4
Valid	Sun Team Ltd.	164	0376-4-01-2010	9
Valid	Super Solar 14 Ltd.	165	0903-4-04-2010	0.63
Valid	Quantum Solar Ltd.	166	0937-4-01-2010	0.63
Valid	Paz Solar Ltd. שיכון ובינוי אנרגיה סולאר בע״מ - חדרי	167	0949-4-01-2010	0.49
Valid	Sde Nachum Sun 2a, Lp	168	0952-4-01-2010	3.3
Valid	Mishamar Hanegev Sun, Lp	169	0951-4-01-2010	7.8
Valid	Yakum Energy Ltd.	170	0814-4-01-2010	0.625
Valid	Teashur Green Energies Ltd.	171	0266-4-01-2010	5
Valid	Marom Solar Projects 2 , Lp	172	0935-4-01-2010	0.48
Valid	Marom Solar Projects 1 Lp	173	0812-4-04-2010	0.65
Valid	Eshkol Brosh. Idan-Enlight Lp	174	0897-4-01-2010	3
Valid	Big Shopping Centers Ltd.	175	0502-4-01-2010	0.63
Valid	Hassin-Esh Ltd.	176	0985-4-01-2010	0.5
Valid	Ogen Yielding Real Estate Ltd.	177	1007-4-04-2010	1.4
Valid	Shalev Farm 2005 Ltd.	178	0338-4-01-2010	0.628
Valid	Super Solar Projects 6 Ltd.	179	1063-4-04-2010	2
Valid	Zikim Solar Ltd.	180	0284-4-01-2010	0.63
Valid	Visionair Energy (Ashkelon) Ltd.	181	0959-4-01-2010	0.4
Valid	Bikurei Hama, Lp	182	1062-4-01-2010	7.934
Valid	Solproject 1 Ltd.	183	0959-4-04-2010	0.63
Valid	Ein Harod (Meuhad) Sun, Lp	184	1014-4-06-2010	0.9306
Valid	Bror Hayil Sun,Lp	185	0965-4-01-2010	8.8
Valid	Ein Harod (Meuhad) Sun, Lp	186	0964-4-04-2010	1.258
Valid	Galim South Solar Ltd.	187	0968-4-01-2010	1.487
Valid	Finish Group Ltd.	188	1066-4-04-2010	0.55
Valid	Sunfaran Ltd.	189	0998-4-04-2010	0.4
Valid	Solproject 3 Ltd.	190	0960-4-04-2010	0.617
Valid	Tze'elim Solar Ltd.	191	0285-4-01-2010	0.63
Valid	Elad Alternative Power Ltd Zuk Farm	192	0811-4-02-2010	0.45
Valid	Project Ginosar Solarit Doral Ltd.	193	0923-4-04-2010	0.6
Valid	Project Merav Solarit 2010	194	0999-4-04-2010	4
Valid	Sun Team Ltd Migdal Oz	195	0987-4-01-2010	0.629



Valid	Granot Amot Anergy Solar Projects	196	0958-4-04-2010	0.63
Valid	Shoham Machinery Ltd.	197	1100-4-01-2010	0.2
Valid	Project Yas'ur Solarit 2010 , Lp	198	0365-4-04-2010	0.6
Valid	Big Shopping Centers Ltd.	199	1143-4-01-2010	1.5
Valid	Electric Solar In Hardouf Ltd.	200	0996-4-04-2010	0.4
Valid	Sbs Solar Ltd.	201	0601-4-01-2010	0.5
Valid	Sunshine Energies Renewable 15 Ltd.	202	0963-4-01-2010	0.53
Valid	City 1 Ltd.	203	0411-4-04-2010	0.358
Valid	Tnuport(1990) Ltd.	204	1169-4-04-2010	0.125
Valid	Tnuport(1990) Ltd.	205	1168-4-04-2010	0.95
Valid	Super Solar Projects 3 Ltd.	206	0966-4-01-2010	0.63
Valid	Granot Amot Anergy Solar Projects, Lp	207	1129-4-04-2010	0.63
Valid	Granot Amot Anergy Solar Projects, Lp	208	1172-4-04-2010	0.543
Valid	Aran Sol 6 Lp	209	1092-4-06-2010	1.01
Valid	Sunshine Energies Renewable 16 Ltd.	210	0934-4-01-2010	בוטל
Valid	Sun Team Ltd.	211	0375-4-01-2010	0.1
Valid	Ma'on Region Settlements Energy Lp	212	1184-4-01-2010	4.004
Valid	Sde Yoav, Lp	213	1084-4-01-2010	0.6
Valid	Traditel 2000 Ltd.	214	1218-4-04-2010	0.63
Valid	Marom Solar Projects 3 Amioz, Lp	215	1165-4-01-2010	0.58
Valid	Eshkol Gefen. Barbur-Enlight, Lp	216	1209-4-04-2010	0.5
Valid	Sun Team Ltd.	217	1189-4-01-2010	0.31
Valid	Merkavim Transportation Technologies Ltd.	218	0997-4-04-2010	1.5
Valid	Sde Nehemia Enlight	219	1210-4-04-2010	0.63
Valid	B.S.E Hazorea Solar 2010 , Lp	220	1204-4-04-2010	1.58
Valid	Aran Solar Electricity 111 Ltd.	221	1246-4-06-2010	0.63
Valid	Milotal Frozen Vegetables	222	1268-4-04-2010	0.42
Valid	Messilot Sun Roof	223	1137-4-04-2010	3.3
Valid	Mer Metal Works Ltd.	224	1160-4-01-2010	0.2
Valid	Aran Solar Electricity 101 Ltd.	225	1158-4-04-2010	0.63
Valid	B.S.E Ein Shemer (Upper)	226	1117-4-04-2010	1.85
Valid	Kiryat Shmona Transport	227	1227-4-01-2010	0.105
Valid	Golan Heights Fruit Enlight, Lp	228	1282-4-04-2010	1.5
Valid	Solador Nov Ltd Ltd.	229	1247-4-04-2010	0.2835
Valid	G Israel Commercial Centers Ltd.	230	1404-4-04-2010	0.63
Valid	Marom Solar- Sde Uziyahu	231	1397-4-01-2010	0.25
Valid	B.S.E Hazorea Solar 2010 , Lp (Yodfat)	232	1248-4-04-2010	0.6
Valid	Y.R.D Sheffa Solar Energy, Lp	233	1249-4-04-2010	3
Valid	Yaraon Agricultural Works Ltd.	234	0967-4-01-2010	0.25
Valid	Econergy Flower- Baraness Farm	235	1336-4-04-2010	0.415
Valid	Granot Amot Anergy- Hahotrim	236	1105-4-04-2010	0.63



Valid	Magor Or Haner, Lp	237	1348-4-04-2010	1.25
Valid	Aran Sol A.Z. 9	238	1287-4-01-2010	0.63
Valid	Granot Amot Anergy Solar Projects	239	1203-4-04-2010	0.622
Valid	City 1 Ltd Nazareth	240	0337-4-04-2010	0.555
Valid	Mamran Solar Energy Ltd.	241	1393-4-01-2010	1.5
Valid	Nehoray & Co. Building (1979) Ltd.	242	1712-4-04-2010	0.63
Valid	Keshet -Enlight, Lp	243	1557-4-04-2010	0.63
Valid	Econergy Flower, Lp	244	1399-4-01-2010	0.63
Valid	Solarit Doral Kfar Menahem	245	1108-4-01-2010	5.2
Valid	Shomria Solar Park Ltd.	246	1341-4-01-2010	2.5
Valid	Gambi Sunshine - Gp	247	1575-4-01-2010	0.625
Valid	Super Solar Projects 21 Ltd.	248	1220-4-01-2010	0.625
Valid	Doral-Rapac - Bait Haemeq Holdings	249	1180-4-04-2010	4.5
Valid	Solarit Doral 2010 Ltd.	250	1145-4-01-2010	0.6
Valid	Sun Team Ltd.	251	0988-4-01-2010	0.487
Valid	Manuel Solar (Israel)	252	1334-4-04-2010	0.569
Valid	Marom Sade Solar Projects 6	253	1275-4-01-2010	0.625
Valid	Yadid Energy Kastina Ltd.	254	0330-4-01-2010	0.56
Valid	Yadid Energy Kastina Ltd.	255	0315-4-01-2010	0.48
Valid	Doral-Rapac - Gesher Haziv Holdings	256	1181-4-01-2010	3.5
Valid	Super Solar Projects 13	257	1064-4-01-2010	0.45225
Valid	Shamir Unirom Alternative Energy	258	1125-4-04-2010	1
Valid	Yosef Sehluve 98 Ltd.	259	0990-4-01-2010	0.63
Valid	Israelite Energy Renewable Lp	260	1268-4-04-2010	2.1
Valid	Marom Solar Projects 5 Sapir	261	1669-4-01-2010	0.63
Valid	Archimedes S.P.C Ltd.	262	1539-4-01-2010	0.63
Valid	Manuel Solar (Israel) Ltd.	263	1333-4-04-2010	0.63
Valid	Of - Tov Products (2001) Ltd.	264	0793-4-04-2010	0.63
Valid	E.D.F. Ltd.	265	1208-4-04-2010	1.6
Valid	Manuel Solar (Israel) Ltd.	266	1332-4-04-2010	0.63
Valid	B.S.E Ein Shemer (Upper) Solar Installations 2010 , Lp	267	1112-4-06-2010	0.4
Valid	Izralayet Solar Energy Lp	268	1270-4-04-2010	0.63
Valid	Izralayet Solar Energy Lp	269	1269-4-04-2010	0.5
Valid	Sunflower Sustainable Investments Ltd.	270	1711-4-04-2010	1.95
Valid	Marom Solar Projects 4 Sapir Lp	271	1670-4-01-2010	0.63
Valid	Super Solar Projects 20 Ltd.	272	1405-4-04-2010	1.1
Valid	Ergasol Project 5 Ltd.	273	1706-4-04-2010	0.625
Valid	B.S.D.S Yodfat	274	1290-4-01-2010	1.5
Valid	Alonei Habashan Sun ,Lp	275	1396-4-01-2010	1.05
Valid	Hashram Energy Ltd.	276	1700-4-04-2010	1.06
Valid	Econergy Flower Israel, Lp	277	1194-4-04-2010	1.65



Valid	Sunflower Sustainable Investments Ltd.	278	1705-4-01-2010	0.63
Valid	Sunflower Sustainable Investments Ltd.	279	1704-4-01-2010	0.63
Valid	Ergasol Project 4 Ltd.	280	1424-4-01-2010	0.625
Valid	Sunflower Sustainable Investments Ltd.	281	1542-4-01-2010	0.63
Valid	Sunflower Sustainable Investments Ltd.	282	1543-4-01-2010	0.63
Valid	Sunflower Sustainable Investments Ltd.	283	1545-4-01-2010	0.63
Valid	Super Solar Projects 16 Ltd.	284	1357-4-04-2010	0.977
Valid	Super Solar Projects 15 Ltd.	285	1356-4-04-2010	0.996
Valid	Super Solar Projects 27 Ltd.	286	1288-4-01-2010	0.39
Valid	Hatzeva Green Energies Ltd.	287	1090-4-01-2010	5
Valid	Super Solar Projects 12 Ltd.	288	1011-4-04-2010	1.5
Valid	Dvir Sun Roof, Lp	289	1276-4-01-2010	1.7
Valid	Neve Harif Sun, Lp	290	1219-4-01-2010	4.572
Valid	Neto M.E. Holdings Ltd.	291	1319-4-01-2010	0.629
Valid	Hagiva Y.H. Ltd Ltd.	292	1190-4-01-2010	0.222
Valid	Sunshine Renewable Energy 4 Ltd.	293	0492-4-01-2010	0.625
Valid	Tarabin Sun, Lp	294	1385-4-01-2010	8
Valid	Manuel Solar (Israel) Ltd.	295	1410-4-01-2010	0.63
Valid	Orad Energy Ltd.	296	1338-4-01-2010	0.63
Valid	Orad Energy Ltd.	297	1339-4-01-2010	1.293
Valid	Solar Park Kfar Maimon Ltd.	298	1693-4-01-2010	4.8
Valid	Solar Park Bitha Ltd.	299	1388-4-01-2010	8
Valid	Sunflower Sustainable Investments Israel Ltd.	300	1783-4-04-2010	0.5
Valid	Sion - K.S 2010 , LP	301	1659-4-01-2010	0.625
Valid	Shikun &Binui - Renewable Energy Ltd.	302	1778-4-01-2010	10
Valid	Ergasol Project 2 Ltd.	303	1340-4-01-2010	0.5
Valid	Sun Team Ltd.	304	1155-4-02-2010	0.629
Valid	Sun Team Ltd.	305	1157-4-02-2010	0.62
Valid	Sun Team Ltd.	306	1156-4-02-2010	0.629
Valid	Ergasol Project 3 Ltd.	307	1387-4-01-2010	0.5
Valid	Clal P.V. Smadar Ltd.	308	1671-4-01-2010	8
Valid	Neto Malinda Trading Ltd.	309	1320-4-01-2010	0.272
Valid	Sunshine Renewable Energy 20 Ltd.	310	1175-4-01-2010	0.625
Valid	Shikun &Binui - Renewable Energy Ltd.	311	1665-4-01-2010	8
Valid	Sbs Solar Kerur Ltd.	312	1718-4-04-2010	1
Valid	Super Solar Projects 30 Ltd.	313	1797-4-01-2010	0.63
Valid	Tnuport Hadarim Ltd.	314	1790-4-01-2010	0.5
Valid	Shimshit" Solar Jointventure Klal P.V. And Regba Ltd.	315	1192-4-04-2010	בוטל
Valid	Shimshit" Solar Jointventure Klal P.V. And Regba Ltd.	316	1292-4-04-2010	בוטל
Valid	Solar Park Timorim Ltd.	317	1465-4-01-2010	3.9
Valid	Econergy Israel, Lp	318	1337-4-04-2010	0.983



Valid	Manuel Solar (Israel) Ltd.	319	1335-4-04-2010	0.63
Valid	Shiller Energy Ltd.	320	1772-4-01-2010	0.63
Valid	Or Alum Ltd.	321	1818-4-04-2010	0.279
Valid	Solador Haroe Ltd.	322	1326-4-04-2010	0.201
Valid	Solar Park Nitzana Ltd.	323	1104-4-01-2010	0.928
Valid	Seasollar Ltd.	324	1737-4-01-2010	0.2
Valid	Seasollar Ltd.	325	1738-4-04-2010	0.44
Valid	Seasollar Ltd.	326	1735-4-01-2010	0.3
Valid	Seasollar Ltd.	327	1741-4-04-2010	0.36
Valid	Seasollar Ltd.	328	1739-4-04-2010	0.35
Valid	.A.N.A Nir Oz Holding Assets, Lp	329	0013-4-01-2010	0.63
Valid	Solar Farm M.S Ltd.	330	1086-4-04-2010	0.63
Valid	Arbel Solar Ltd.	331	1166-4-04-2010	1.7
Valid	Solar Farm Ltd.	332	0989-4-04-2010	0.63
Valid	Solar Farm Ltd.	333	1088-4-04-2010	0.428
Valid	Solar Farm M.S. Ltd.	334	1087-4-04-2010	0.63
Valid	Solar Farm M.S. Ltd.	335	0989-4-04-2010	0.285
Valid	Granot Amot Anergy Solar Projects Lp	336	1342-4-01-2010	1.45
Valid	Granot Amot Anergy Solar Projects Lp	337	1323-4-01-2010	0.99
Valid	Lahav Sun, Lp	338	1358-4-01-2010	3.5
Valid	Shaniv Tofes Lp Reshuma	339	1266-4-04-2010	0.35
Valid	Sunflower Sustainable Investments Ltd.	340	1544-4-01-2010	0.63
Valid	Zukit 1985 Drainage Construction & Development Ltd.	341	1736-4-04-2010	0.3
Valid	Solar Farm Ltd.	342	0681-4-01-2010	3.43
Valid	Solar Farm Ltd.	343	0682-4-01-2010	2.5
Valid	Solar Farm Ltd.	344	0678-4-01-2010	1.2
Valid	Solar Farm Ltd.	345	0675-4-01-2010	0.14
Valid	Solar K.S., LP	346	1547-4-01-2010	6.966
Valid	Solar Farm Ltd.	347	0680-4-01-2010	1.38
Valid	Super Solar Projects 19 Ltd.	348	1289-4-01-2010	0.206
Valid	Super Solar Projects 24 Ltd.	349	1523-4-04-2010	3.5
Valid	Solar Farm Ltd.	350	0679-4-01-2010	0.2
Valid	Super Solar Projects 26 Ltd.	351	1744-4-01-2010	9
Valid	Super Solar Projects 28 Ltd.	352	1858-4-04-2010	0.496
Valid	Beit Kama Sun, Lp	353	1524-4-01-2010	בוטל
Valid	Zim Ecologic Ltd.	354	0017-4-01-2011	0.38
Valid	Sunshine Renewable Energy 13 Ltd.	355	1708-4-02-2010	0.54
Valid	Ariel Omer Ltd.	356	1546-4-01-2010	5
Valid	Brachya Green Energies Ltd.	357	1749-4-01-2010	10
Valid	Dklh Shelf Company 4 Ltd.	358	1903-4-02-2010	0.63
Valid	Solag Solar Project, Lp	359	1600-4-04-2010	בוטל



Valid	Sunflower Sustainable Investments Ltd.	360	1785-4-01-2010	0.63
Valid	Sunflower Sustainable Investments Ltd.	361	1807-4-01-2010	0.63
Valid	Casa B.S. Holdings	362	0730-4-04-2010	0.45
Valid	Beit Kama Solar, Lp	363	1904-4-01-2010	0.99
Valid	Helios Silver Ltd.	364	0012-4-04-2010	0.63
Valid	Lge Lior Green Energy Ltd.	365	1239-4-01-2010	10
Valid	Ramot Menashe Rental Properties	366	1324-4-01-2010	0.215
Valid	Doral-Rapac - Reshafim Holdings	367	1182-4-04-2010	0.5
Valid	Clal Pv Park Reem Ltd.	368	1841-4-01-2010	3.25
Valid	Elite Rental Properties Ltd.	369	1164-4-01-2010	0.4
Valid	Center For The Rural Development	370	1777-4-04-2010	0.52
Valid	Tnuport 1990 Ltd.	371	1789-4-01-2010	0.63
Valid	Sunshine Solarm, Gp	372	1878-4-04-2010	בוטל
Valid	Sun Team Ltd.	373	0632-4-03-2010	0.56
Valid	Shimshit Solar Jointventure Klal P.V.	374	1193-4-04-2010	בוטל
Valid	Dvir Sun, Lp	375	1415-4-01-2010	4.3
Valid	Ralco Byron Renewable Energy, Lp	376	1126-4-01-2010	0.43
Valid	Sunshine Glickson-Gp	377	1672-4-04-2010	בוטל
Valid	Solar Park Peduim Ltd.	378	1637-4-01-2010	7.934
Valid	Solador Degania Ltd.	379	1742-4-04-2010	1.6
Valid	Solproject 4 Ltd.	380	1660-4-01-2010	2.116
Valid	Sunshine Renewable Energy	381	1707-4-02-2010	בוטל
Valid	Biacolengyc Ltd.	382	1857-4-04-2010	0.452
Valid	Kmehin Sun, Lp	383	1746-4-01-2010	5.8
Valid	Lotan Sun, Lp	384	1634-4-01-2010	7
Valid	Orad Energy Ltd.	385	1206-4-01-2010	1.209
Valid	Edri-El Israel Green Energy Ltd .	386	1729-4-04-2010	1.2
Valid	B.S. Regev Management & Investment Ltd	387	1699-4-01-2010	0.362
Valid	Sun Team Ltd.	388	1057-4-01-2010	0.6
Valid	Orsol Energy 1, Lp	389	1383-4-01-2010	1.13
Valid	Clal P.V. Daphna Ltd.	390	1522-4-01-2010	10
Valid	Ein Hashofet Solar, Lp	391	1728-4-04-2010	3
Valid	Simcha Dahman	392	0207-4-02-2011	0.63
Valid	Enfinity Energy Ron Ltd.	393	0126-4-01-2011	0.994
Valid	Shikun &Binui - Renewable Energy Ltd.	394	0137-4-04-2011	0.457
Valid	Shikun &Binui - Renewable Energy Ltd.	395	0020-4-01-2011	0.596
Valid	Shikun &Binui - Renewable Energy Ltd.	396	0062-4-01-2011	0.161
Valid	Ditron Precision Ltd	397	1327-4-04-2010	0.25
Valid	Ergasol Project 7 Ltd.	398	0167-4-04-2011	0.37
Valid	Re'em Junction Investments Ltd	399	1582-4-01-2010	0.475
Valid	Sunshine Renewable Energy 24 Ltd.	400	1856-4-04-2010	בוטל



Valid	Galilee Ralco Byron Energy, Lp	401	1291-4-04-2010	0.6
Valid	Or Sun Energy 2 Lp	402	1910-4-01-2010	8
Valid	Or Sun Energy 10 , Lp	403	0052-4-04-2011	1.6
Valid	S.F. Solar Profit Ltd	404	1855-4-04-2010	0.442
Valid	Star Glass Ltd.	405	1730-4-04-2010	0.2
Valid	Kefar Rupinsolarit Doral Ltd.	406	1188-4-04-2010	0.5
Valid	Shikun &Binui - Renewable Energy Ltd.	407	0063-4-01-2011	0.555
Valid	Shikun &Binui - Renewable Energy Ltd.	408	0018-4-01-2011	0.207
Valid	Shikun &Binui - Renewable Energy Ltd.	409	0021-4-01-2011	0.576
Valid	B.S. Brimag Energy Investments Ltd	410	1661-4-03-2010	2.6
Valid	Sbs Solar Manpetaltd	411	1717-4-04-2011	1.65
Valid	Ein Yahav Green Energies Ltd	412	1716-4-01-2010	5.5
Valid	Massuot Yitzchak Solar Energy Ltd	413	1466-4-01-2010	2.5
Valid	Solarpower South 1 Ltd.	414	1697-4-01-2010	1.67
Valid	Environmental Services Company Ltd	415	0145-4-01-2011	1.2
Valid	Patish (East) Green Energies Ltd	416	1521-4-01-2010	8.29
Valid	Sunflower Sustainable Investments Israel Ltd.	417	1819-4-04-2010	0.63
Valid	Sbs Solar Ltd.	418	0600-4-01-2010	0.437
Valid	Sunday Project 1 Ltd.	419	1607-4-04-2010	0.63
Valid	Shikun &Binui - Renewable Energy Ltd.	420	1667-4-01-2010	0.47
Valid	Shikun &Binui - Renewable Energy Ltd.	421	1666-4-04-2010	0.46
Valid	Nova Yad Mordechay Ltd	422	1874-4-01-2010	2
Valid	Phoenicia Glass Works Ltd	423	0006-4-01-2011	5
Valid	Solar Farm Ltd.	424	0677-4-01-2010	1.85
Valid	Project Yas'ur Solarit 2010 , Lp	425	1551-4-04-2010	0.5
Valid	B.S. Brimag Energy Investments Ltd	426	1838-4-04-2010	0.63
Valid	Shikun &Binui - Renewable Energy Ltd.	427	1779-4-01-2010	0.336
Valid	Shikun &Binui - Renewable Energy Ltd.	428	1780-4-01-2010	0.343
Valid	Shikun &Binui - Renewable Energy Ltd.	429	1581-4-01-2010	1.1
Valid	Pgs Solar Ltd.	430	0221-4-04-2011	2.2
Valid	Solador H.K. Golan Ltd.	431	1853-4-04-2010	0.32
Valid	Clal P.V. Amot Energy - Solar Projects Ltd	432	1533-4-01-2010	4
Valid	Sunshine Renewable Energy 27 Ltd.	433	1732-4-01-2010	בוטל
Valid	Energy- Sde Ilan 2010 Ltd	434	1413-4-04-2010	0.5
Valid	Yoav Horowitz Agriculture Ltd.	435	1872-4-03-2010	0.3
Valid	Seasollar Ltd.	436	1842-4-04-2010	0.23
Valid	Hason M.S. Shdera (1993) Ltd	437	0041-4-04-2011	0.3
Valid	Tropical Degil Energy (2009) Ltd	438	1226-4-04-2010	0.35
Valid	Sun Shomrat Lp	439	1831-4-01-2010	0.63
Valid	Orsun Energy 9, Lp	440	0024-4-01-2011	1.1
Valid	Galil Ma'ayan Baruch Power Ltd.	441	0044-4-04-2011	0.63



Valid	Industry Area C.M.S.D. 2010 Ltd.	442	1362-4-01-2010	0.5
Valid	Manara Power Ltd.	443	0045-4-04-2011	0.63
Valid	Shikun &Binui - Renewable Energy Ltd.	444	1850-4-01-2010	8
Valid	Revadim Solar Ltd.	445	0073-4-01-2011	2.2
Valid	Evron Enlight, Lp	446	913811	0.5
Valid	Becologic Ltd	447	0254-4-04-2011	0.466
Valid	Big Shopping Centers Ltd.	448	1422-4-04-2010	0.63
Valid	Dorot Sun, Lp	449	1720-4-01-2010	10.8
Valid	Ranen Sun, Lp	450	1402-4-01-2010	7
Valid	S.G.Y Refet Hof Hasharon Alternative Energy Lp	451	0060-4-04-2011	1.53
Valid	Greenstone Industries Ltd.	452	1317-4-04-2010	0.63
Valid	Israel's Financial Levers Ltd.	453	1763-4-01-2010	1.85
Valid	Goldreich Aba Yaakov	454	0011-4-01-2011	10.8
Valid	Shikun &Binui - Renewable Energy Ltd.	455	0091-4-01-2011	7.6
Valid	Super Solar Tender For Ground Mounted Systems 1 Ltd	456	405312	3.999
Valid	Mitzpe Ramonsolar Park Ltd	457	413112	7
Valid	Super Solar Tender For Ground Mounted System 2 Ltd.	458	429312	4.998
MW	758.7145			
	Accumulated Power in Conditional Licenses			

