APPENDIX A: COUNTRY SPECIFIC LOW-INCOME ENERGY PROGRAMS

A. Low-Income Programs in the United States

Low-income energy assistance programs in the U.S. are provided through a variety of different federal, state, and local governments. At the federal level, the Low-Income Home Energy Assistance Program (LIHEAP) is a mandatory block grant program whose mission is to assist low-income households, particularly those with the lowest incomes that pay a high proportion of household income for home energy, primarily in meeting their immediate home energy needs. States, territories, and Indian tribes that wish to assist low-income households in meeting the costs of home energy may apply for a LIHEAP block grant. Congress established the formula for distributing funds to states based on each state’s weather and low-income population. Home energy is defined by statute as a source of heating or cooling in residential dwellings. The target population for LIHEAP assistance is those whose household income does not exceed the greater of 150 percent of the federal poverty level or 60 percent of the state median income. Grantees may not set income eligibility standards below 110 percent of the federal poverty level, but may give priority to those households with the highest home energy costs or needs in relation to income. This program is sponsored and administered by the United States Department of Health and Human Services. In 2008, the appropriation for LIHEAP was $1.98 billion, with additional contingency funding of $181 million to provide emergency assistance during times of extreme weather conditions or energy price increases, at the discretion of the President. LIHEAP assistance was provided to approximately 5.7 million households in 2007, which represents participation by 4.8% of total US households.

LIHEAP is supplemented by a variety of state and local government programs that provide rate assistance and/or funding for energy efficiency programs. Based on Concentric’s research, it appears that 38 of 51 jurisdictions (including the District of Columbia) provide low-income energy assistance programs to supplement the federal government’s LIHEAP offering. In summary, individual states provided direct rate assistance of $1.82 billion and support for energy efficiency programs of $267.5 million during 2006. For a complete overview of the LIIEPs offered in the United States, please refer to Appendix A of this report. The following section of this report summarizes representative low-income energy assistance programs offered in seven different states:
California Alternate Rates for Energy (CARE): Low income customers who are enrolled in the CARE program receive a 20 percent discount on their natural gas and electric bills, and are not billed in higher rate tiers that were created for Southern California Edison, Pacific Gas and Electric Company, and San Diego Gas and Electric Company. CARE is funded through a rate surcharge paid by all other utility customers. Customer eligibility is contingent upon household size and annual income, as determined by the California Public Utilities Commission. For example, households consisting of one or two persons with an annual income at or below $29,300 are eligible for assistance payments from CARE. Those households with three members and annual income at or below $34,400 are eligible.

New Jersey’s Universal Service Fund (USF): The low income energy assistance program, which began in October 2003, is described as a fixed credit percentage of income payment plan under which participants are required to pay no more than six percent of their annual income toward electric and gas bills – three percent for electric and three percent for gas or six percent for all electric heat customers. Credits to customers are capped at $1,800 annually. New Jersey electric and gas customers whose household income is equal to or less than 175 percent of the federal poverty level are eligible for the program. By the end of fiscal year 2006, the USF program was serving over 173,000 households and was providing benefits worth $111.3 million. A companion program called Fresh Start was implemented in March 2004. The program allows those with past due amounts to have their bills forgiven if they start paying their monthly bills in full and do so for an entire year. In FY 2006, Fresh Start payments totaling $11.7 million were made to almost 33,000 households. A third program called Lifeline, provides an annual energy bill credit of $255 to 319,000 low income senior citizens and disabled persons. The Lifeline program had historically been funded from state casino revenues. However, the Governor's 2004 budget shifted funding for all three programs to a surcharge on utility bills.

Ohio’s Electric Universal Service Fund: In July 1999, Ohio’s restructuring legislation established a universal service fund for low-income customer assistance programs, incorporating the long-standing Percentage of Income Payment Plan (PIPP), targeted low-income energy efficiency programs, a consumer education program, and administration costs. Funding originates from a universal service rider assessed on retail electric distribution service
rates. The PIPP was first implemented in 1983. Participants with incomes up to 150 percent of federal poverty guidelines are required to pay a percent of their monthly household incomes to the utility providing their primary and secondary heating service. The maximum PIPP payment is 15 percent of household income, and, if customers remain current on their PIPP payments, they cannot be shut off at any time regardless of their arrears. Ohio’s PIPP is the largest and oldest state-mandated PIPP in the country serving over 200,000 households in FY 2007. The average PIPP payment for FY 2007 was $477. The law requires electric utilities to collect the rider revenues and remit them to OCS, which keeps them in an interest bearing account called the USF. The USF rider is calculated each year based on the revenue requirements of the program, and the revenue collected varies because it is based on electric consumption. The natural gas utilities administer the gas PIPP, and the rider is embedded within gas distribution charges and the companies collect for costs as needed, rather than readjusting the rider annually.

Pennsylvania Customer Assistance Programs: The state’s major gas and electric utilities are required to provide Customer Assistance Programs (“CAP”), which generally provide a percentage of bill plan or a percentage of income payment plan, wherein low-income customers’ utility payments are based upon their incomes and/or their utility bills. Some programs include arrears forgiveness; others provide flat rate discounts or bill credits. Under electric and gas restructuring legislation, all utilities are required to offer universal service programs, to include CAPs, and to continue pre-restructuring low income programs. In 1987, Pennsylvania first mandated the Low-Income Usage Reduction Program (“LIURP”), which is an energy efficiency program that is intended to encourage conservation and more efficient use of resources. The states’ 15 major gas and electric utilities participate in LIURP with a funding level equal to about 2/10th of one percent of each utility’s total revenues. LIURP includes a customer education component that addresses energy savings, regular bill payment behavior, and provides application assistance.

Michigan Low Income and Energy Efficiency Fund (LIEEF): This program was originally established in 2000 in conjunction with electric restructuring legislation in Michigan. From February 2002 through May 2008, the Michigan Public Service Commission disbursed a total of $369 million in low-income energy grants. The purpose of the LIEEF is to provide shut-
off and other protection for low income customers and to promote energy efficiency by all
customer classes. The majority of the funding has gone toward low-income bill payment
assistance, and a majority of that amount has been made available for distribution through the
Family Independence Agency, the state LIHEAP grantee. Most of the remaining funds have
gone for low-income energy efficiency programs. LIEEF is funded through a surcharge on
the utility’s distribution rates from Detroit Edison and Consumer’s Energy, the state’s two
largest utilities.

**Texas Low Income Discount Program**: The low-income discount started at about 10
percent, or $10 per month on average. In May 2002, the Texas PUC increased the discount
to 17 percent. During FY 2002, over 750,000 low income households received discounts
totaling about $87 million, but the discount soon became a target for the legislature. On
September 1, 2005, the Texas legislature, in an attempt to balance the state budget, shifted
more than $200 million annually from a system benefit fund that financed the low-income
discount for electric customers to the state’s general fund. On August 8, 2005, the Public
Utility Commission of Texas sent letters to about 391,000 recipients informing them their
electric bill discounts would end after their August bill. In place of these government funded
rate assistance and energy efficiency programs, TXU Energy has contributed up to $25
million to fund a new low-income discount program, and CenterPoint Energy Houston
Electric LLC will spend $10 million per year on low-income bill payment assistance.

**New Hampshire’s Electric Assistance Program** (EAP), also called the Tiered Discount
Program (TDP), and its Core Energy Efficiency Program were implemented statewide during
2002 for customers of regulated electric utilities. The legislature authorized a systems benefit
charge for such programs: a system benefit charge of 3 mils per kWh is paid by all electric
customers – 1.8 mils for the Electric Assistance Program and 1.2 mils for the Core Energy
Efficiency Program. The program was revised by the New Hampshire PUC in October
2006. Under the new design, customers are responsible for electric bills equal to
approximately 4.5 percent of household income. During FY 2007, the program provided
discounts averaging $420 to 27,000 households. Customers are eligible to participate in the
program if their household income is at or below 185 percent of the federal poverty
guidelines, and they must be customers of specified regulated electric utilities.
**Georgia:** In 1989, the Georgia Public Service Commission mandated that major gas and electric utilities waive their monthly service charge for customers age 65 or over who earned less than $10,000 per year. Based on changes made to the program during 2005 and early 2006, the income limit has increased from $12,000 to $14,355 and the service charge waivers from $10.50 to $14.00 per month. At least 55,000 senior citizens receive the electric discount each year, and about 35,000 seniors receive the natural gas discount. Total rate assistance provided by utilities under this waiver program was $15 million in 2006.

**Arizona:** Utilities are required to offer rate assistance to low income customers in the form of a variable discount based on the amount of electricity used each month. Specifically, low-income consumers are eligible to receive a 30 percent discount on the first 400 kWh of electricity they use, 20 percent off usage between 401 and 800 kWh, 10 percent off usage between 801 and 1200 kWh, and a $10 credit for any usage above this amount. Arizona's largest utility, Arizona Public Service, offers a discount of up to 40 percent off the cost of electricity through its Energy Support Program. Additionally, through the Energy Support Program, customers may also be exempt from paying Power Supply Adjustor surcharges, which accounts for the company's purchased power costs. Eligibility for these low-income assistance programs is based on the federal poverty guidelines; generally, customers at or below 150% of the federal poverty guidelines will be eligible to participate in the programs. The utilities typically collect funds from residential customers to support these programs.

In summary, during 2006, investor-owned public utilities and municipal government utilities offered rate assistance of $328.6 million and energy efficiency support of $53.2 million. This includes offer assistance to low-income energy consumers in the form of rate assistance and support for energy efficiency programs, such as installing programmable thermostats or replacing inefficient home appliances. Appendix A contains a tab that summarizes LIHEPs offered by investor-owned utilities and municipal utilities, based on information provided on the LIHEAP web site.

In some instances, state and local governments do not supplement the federal LIHEAP support. However, low-income energy assistance is also provided by charitable and religious organizations. Concentric’s research found this was especially true in states with warmer climates and lower home
heating demand, including Texas, Florida, Louisiana, South Carolina, Alabama, and Mississippi. During 2006, charitable and religious organizations provided low income energy assistance totaling $147.5 million to eligible recipients. Many of these programs are designed to provide emergency assistance to avoid service disconnections for senior citizens, those with medical conditions, and terminally ill and disabled persons. Other programs are designed to educate consumers about how to use energy more efficiently in their homes and how to insulate and weatherize their homes to reduce energy consumption.

Finally, low-income energy consumers received miscellaneous assistance in the form of bulk fuel discounts or other unique programs that could not be categorized into one of the more traditional types of rate assistance. According to the LIHEAP web site, these miscellaneous programs accounted for an additional $33.5 million in assistance to low-income energy consumers in 2006. Perhaps the most prominent example of these miscellaneous programs is the bulk fuel discount program in Massachusetts, which was established in the winter of 1991 and which pays home heating oil dealers the lesser of either a set margin, currently 30 cents per gallon, or their regular retail price on the date of delivery. In 2006, the bulk fuel discount program saved LIHEAP eligible households between 10 and 20 cents per gallon, and accounted for $3.97 million in total rate assistance.

A. Low-Income Programs in the United Kingdom

Low-income energy assistance programs in the United Kingdom (i.e., England, Scotland, Northern Ireland, and Wales) have taken on slightly different characteristics than those offered or contemplated in Canada and the United States. For a complete overview of the LIEPs offered in the United Kingdom, please refer to Appendix A of this report.

Electric generation and retail sales have been deregulated in England and Wales, and the regulatory authority for transmission and distribution has no formal regulatory powers concerning wholesale electricity markets. However, it can threaten to refer what it regards as anti-competitive behavior for governmental anti-monopoly prosecution. The retail electric market is considered open to competition, and energy customers may choose their supplier and may switch between suppliers. The Office of Gas and Electricity Authority has strongly encouraged utilities in the United Kingdom to offer rate assistance and energy efficiency programs to low income and vulnerable customers.
The following section briefly describes the three primary government-sponsored LIEPs in the United Kingdom:

- **Winter Fuel Payment**: Program provides an annual payment to help people aged 60 and over with the costs of keeping warm this winter. If you are aged 60 to 79 and you are entitled to receive a Winter Fuel Payment, this year you will get either £125 or £250, depending on your circumstances in the qualifying week (15 to 21 September 2008). If you are aged 80 or over and you are entitled to a Winter Fuel Payment, this year you will either £200 or £400, depending on your circumstances in the qualifying week. You do not pay tax on Winter Fuel Payments.

- **Cold Weather Payment**: Program provides payments to vulnerable households who are on certain benefits in periods of very cold weather in their area, to help pay for extra heating costs. To get a Cold Weather Payment the average temperature must be recorded as, or expected to be, 0°C or below for seven days in a row. These include a guaranteed cold weather payment of £10 for all gas customers, whilst those aged 60 or over receive an additional payment based upon the number of days the temperature is below zero between December and February; increase the Cold Weather Payment to all Age Concern gas customers over the age of 80 from £10 to £20. All customers on our Age Concern product also receive a free early warning hypothermia thermometer and four free low energy light bulbs, and all are eligible for further reduced energy efficiency measures.

- **Warm Front Scheme**: Established in 2000 (previously called Home Energy Efficiency Scheme), this program provides grants to improve heating and energy efficiency of private sector housing in England. The grant provides energy-efficiency advice, energy-efficient light bulbs, and insulation measures such as cavity wall insulation, loft insulation, hot water thermal jackets, and heating improvements. The scheme is aimed at vulnerable households in receipt of eligible benefits. Warm Front also provides a Benefit Entitlement Check to maximise income. The Warm Front Grant provides a package of insulation and heating improvements up to the value of £2,700 (or £4,000 if oil central heating is recommended).
In March 2000, the Office of Gas and Electricity Markets (“OFGEM”) published a document titled “The Social Action Plan,” which set out a program intended to tackle fuel poverty. According to the report, a household is considered to live in “fuel poverty” if it spends more than ten percent of its income in order to heat its home to the temperatures recommended by the World Health Organization (i.e., 21 degrees C in the living room and 18 degrees C in other occupied rooms). The report states that approximately five million households in Great Britain spent more than ten percent of their income to heat their homes, while approximately 1 million households spent 30 percent of their income on fuel. The nationwide average at the time of this 2000 report was between four and five percent.

The report cites a survey that found that the majority of households living in fuel poverty were pensioners, often single household pensioners, who were mainly reliant on the state pension. The 1996 English House Condition Survey showed that those aged 60 and over accounted for around half of all fuel poor households, those with young children accounted for 17 percent, and single parent households accounted for ten percent.

The report states that fuel poverty is caused by several interrelated factors: (1) low income; (2) the condition of the property; (3) the efficiency of the heating system; (4) the size of the property; and (5) the price of fuel.

The Social Action Plan was divided into four primary sections, which OFGEM identified as contributing to the necessary reforms that would benefit households living in fuel poverty. These included:

License modifications: aligning obligations across the electric and gas industry to ensure consistency; requiring suppliers to accept payments in cash on a fortnightly or more frequent basis; requiring suppliers to publish Codes of Practice specifically for their prepayment customers; improve energy efficiency advice to best practices level; and harmonize and improve monitoring requirements.
Broader structural changes: review whether suppliers should be allowed to prevent customers from switching to another provider because of their indebtedness; provision of comparable pricing information so that consumers better understand the range of options available in the market; new price controls on electricity and natural gas suppliers that will result in lower prices for consumers; reduction of the prepayment meter surcharge imposed on customers, most of whom are low-income; development of additional energy efficiency standards of performance; improvements to the operation of Fuel Direct, which is a program in which the Department of Social Services deducts an amount each week from income support and pay it directly to the energy suppliers; consider lowering tariff rates and standing charges for customers who consume less electricity and continue to study the correlation between income level and energy use; continue to monitor innovative new programs and conduct additional research; examine reasons for self-disconnection and self-rationing and whether this behavior is linked to payment method; encourage customers to switch from prepayment meters to alternate payment methods through better education programs; and study ways to identify and help vulnerable customers, especially elderly customers at risk of hypothermia who do not have prepayment meters.

Measuring and Reviewing Progress: develop 12 key indicators to measure progress, including percentage of customers experiencing fuel poverty; number of customers using prepayment meters; debt repayment levels; monitor tariff and payment choices offered by suppliers, especially cash payment options; participation of disadvantaged customers in the competitive marketplace; monitor priority service registers; collect information on the number of disconnections; monitor levels of self-disconnection; monitor energy efficiency advice provided by suppliers as key indicator; review the number of disadvantaged customers assisted through energy efficiency initiatives; and measure customer satisfaction with payment methods through annual surveys.

Timetable to Monitor Progress: explains how the actions taken by OFGEM relate to the priorities they have identified for reducing or eradicating fuel poverty in the United Kingdom.

In December 2004, the OFGEM issued another paper entitled “Supplying Low Income and Vulnerable Customer Groups,” in which it addressed the inquiries of gas and electricity suppliers regarding whether developing tariffs aimed specifically at low income and vulnerable customer
groups would conflict with relevant regulatory obligations and competition law. In essence, the dominant suppliers were concerned that such tariffs could be perceived as anti-competitive and discriminatory. The OFGEM stated that it did not view such tariffs to be a violation of the supply license, competition law, or other consumer protection laws. The OFGEM clarified that there is no license restriction that prevents suppliers from offering different tariffs to different customers. A supplier may, for example, offer lower income and vulnerable customer groups tariffs that are less profitable than other tariffs. The OFGEM cites the Utilities Act of 2000 when it observes that licensees must not cross-subsidize, or receive any cross-subsidy from any other business of the licensee or an affiliate. This would prevent a supplier from subsidizing a loss-making tariff for vulnerable customers from another part of its business outside the supply of gas or electricity, but it does not mean that suppliers are prevented from offering tariffs that make less profit than those offered to non-vulnerable customers. Likewise, the OFGEM indicates that a tariff for the benefit of low income or vulnerable customers is not, by definition, anti-competitive. Rather, the OFGEM states that suppliers should consider whether the tariff is intended to prevent, restrict, or distort competition, or whether the tariff might be considered an abuse of the suppliers’ dominant market position.

In April 2008, the OFGEM convened a fuel poverty summit whose purpose was to improve identification and targeting of existing help to fuel poor customers. The summit brought together Ministers, government officials, energy suppliers, and consumer organizations to agree upon a program of practical action to improve targeting of existing help to those in fuel poverty and help more vulnerable consumers participate more effectively in the energy market. The focus of the summit was primarily on the tariffs and assistance provided by suppliers, including the 225 million additional pounds agreed to by suppliers in the March 2008 budget, and how others could play a part in ensuring that this assistance reaches those who need it. As the summit, and in subsequent discussions, a number of key initiatives and themes were developed and agreed upon as part of the fuel poverty action program. Those key initiatives will be reviewed by Ministers and OFGEM at an October meeting. The four primary themes were:

1) Improve the way we identify those in fuel poverty so that the available help is directed to those who most need it.

2) Ramp up the level of help available from suppliers to those at risk of fuel poverty.
3) Provide support so that vulnerable customers are able more effectively to use the energy market to get the best deal.

4) Ensure that tariff differentials for different payment methods are fair and justified.

Both OFGEM and the Business and Enterprise Committee of the House of Commons have undertaken studies to examine and investigate whether energy markets in the UK are operating effectively, so that individual customers will not suffer from energy prices that are higher than reasonably justified by market conditions, and so that the UK economy will remain competitive with other countries.

B. Low Income Programs in France

Like many European countries, France offers a variety of government-sponsored programs intended to reduce energy consumption and to make electricity and natural gas service more affordable for low-income households. The following section provides an excerpt from a recent report entitled “Detailed report on the different types of existing mechanisms to tackle Fuel Poverty”, which was issued by an organization known as European Fuel Poverty and Energy Efficiency (“EPEE”). The report provides a thorough history concerning the evolution of French programs intended to address fuel poverty as a symptom of general impoverishment. The relevant sections of that report describe low-income energy programs in France as follows:

In France, fuel poverty is not generally recognised as a distinct social problem. The most common manifestation of difficulties in meeting household energy costs is the inability to pay fuel bills but this is mainly seen as a symptom of general poverty. Consequently the development of a legal framework to assist families to maintain warm and healthy homes has been in the context of wider policies to combat general poverty and social exclusion. This anti-poverty objective was initially supported by a law of December 1, 1988 on a guaranteed minimum household income, which has now been formalised within the Social Action and Family Code.

1985 saw the introduction of the first Convention on Poverty and Vulnerability to involve the key nationalised French gas and electricity industries (EDF-GDF) in action to subsidise unaffordable fuel bills. This policy evolved to become the Solidarity Energy Funds (FSE), a source of financial assistance for vulnerable households who are unable to pay their energy bills. A current annual budget of some €46 million. The source of funding is:
It should be noted that in 1945 the State nationalised the production, distribution and supply of both gas and electricity. A single national agency was created for this purpose: EDF - GDF, which subsequently split into EDF (electricity) and GDF (gas).

For some 60 years, these two agencies have exercised a monopoly within the gas and electricity industries. As nationalised industries benefiting from state investment in the industry infrastructure both services have been able to provide: very highly developed electricity and gas networks across France; very efficient distribution systems; and reliable security of supply. In addition, the State has been able to set a regulated tariff, which ensured that electricity and gas tariffs were the same everywhere in France and among the least expensive in Europe. With the opening of the competitive energy market, the regulated tariffs will disappear.

Law No 90-449 of the 31st of May 1990 (the Besson Law) seeks to establish the right to a dwelling and to ensure that the dwelling is of an acceptable standard. The law lays down the principle of guaranteeing, particularly for those who are disadvantaged in some way, assistance from local government to gain access to a dwelling and/or to maintain it. This law also requires implementation of county plans of actions for housing and for disadvantaged families and individuals (PDALPD).

Law No. 92-722 of 29th August 1992, is intended to resolve poverty and other forms of social exclusion issues. In doing so, it adopts and builds on the law of 01/12/88 in addressing some key aspects of fuel poverty: “any individual or family in vulnerable circumstances has a right to assistance from local government in order to access, or maintain access, to water or energy supplies”. The law is intended to define the principle of a right to essential utility services (water, gas and electricity) by establishing a national protocol to prevent disconnection in cases of non-payment of bills. The mechanism by which utility services are to be sustained comprises a number of national conventions signed on behalf of the State and representatives of EDF, GDF and water companies. These conventions define the level of assistance available and the categories of household eligible for assistance.

In the context of the PDALPD, within each county conventions are signed by representatives of the State; by representatives of EDF, GDF and other suppliers of energy or water; by communes and, if appropriate, by municipal social action centres; and by other agencies with a role in social welfare protection. These local (county level) conventions determine conditions for application of national conventions and also how best to implement advice and guidance programmes to maximise the rational use of both water and energy. This work is funded through the Solidarity Energy Funds (FSE).
The orientation Law No 98-657 from 29/07/98, relating to anti-social exclusion policy gives mandatory authority to maintenance of energy and water supplies. Law n°2000-108 of 10/02/00, refers to the modernisation and development of the public electricity service and guarantees access to electricity supply for vulnerable households (in effect the right to energy is strengthened). The law extends the available forms of assistance for vulnerable persons and allows local authorities to intervene in a number of areas including: thermal insulation improvements; heating controls and timers; and the acquisition of energy efficient domestic appliances.

The same law 2000-108 also gives effect to the European directive 96/92/CE on the opening of domestic electricity markets. Decrees published between 2000 and 2001 will facilitate competition in electricity markets; enable participation by external energy producers in France; and introduce the possibility of customers choosing their supplier. However, one of the first consequences will be the end of the regulated electricity tariff.

Law No 2000-1208 of 13/12/00 relating to social inclusion and urban renewal covers the concept of a decent dwelling and makes it mandatory for any landlord letting a property to ensure that the dwelling does not present any risk to the health and safety of the occupant(s) and that the property satisfies a number of conditions that make it acceptable for habitation. This law is also the basis of a decree of 30/01/02 on decent housing and mixed tenures, which imposes an obligation on towns with more than 3,500 inhabitants, to ensure that 20% of the dwelling stock must be reserved for social housing.

Law No 2004-809 of 13/08/04 on local devolution modifies management of the solidarity energy funds (FSE), which have been integrated into the Dwelling Solidarity Funds (FSL) since the 1st of January 2005, and are now managed by the county commissions (comprising county councils, local authorities, energy suppliers and local social welfare organisations). The county councils are therefore the main drivers of solutions to fuel poverty and other domestic energy problems.

Two additional decrees of Law n°2000-108 of 10/02/00, relating to the modernization and development of the public electricity service, are also relevant.

1) A Decree of 08/04/04 relates to a social electricity tariff (as a service to meet primary needs); from the 1st of January 2005, households on very low incomes have been able to benefit from a special discounted electricity tariff. Households whose annual income is €5,520 (€460 per month) or less can benefit from a reduction of 30% (for a single person) to 50% (couple with 2 children or more) of the cost of the first 100 kWh each month. The process is initiated by the French Health Agency (CAM) which provides the electricity supplier with a list of eligible households; the supplier then sends the customer an application form for completion.

2) Decree 2005-971 from 10/08/05 covers procedures to be followed in cases of unpaid electricity bills. Access to supply must be maintained where the case has been referred to
the Dwelling Solidarity Fund (FSL) and at least until a decision has been taken on the appropriate course of action. During this period, a limited power supply will be maintained, providing for minimum electricity needs. In addition, EDF is committed to a no disconnection policy until contact has been established between the company and the customer, or the customer has been able to approach social services to explain the situation and seek assistance in paying the amount owed.

Finally, the Law of the 13th of July 2006 relating to national housing standards introduced a ban on disconnection from electricity supply during the period November 1 to March 15 for any household in receipt of financial assistance from the Dwelling Solidarity Funds or that had benefited from the funds in the previous twelve months.

In the context of public health, a circular from 09/08/78 introducing revisions to county sanitary regulations addresses the importance that must be given to problems of heating and ventilation. It is also specified that “all measures should be taken to ensure adequate heating”. The effects of these laws and their decrees of application in addressing fuel poverty are to promote:

• a right of access to energy supply
• a right to maintain energy supply
• a social tariff to provide discounted electricity prices for disadvantaged households
• financial help through the FSL to enable households in difficult financial circumstances to pay some or all of their energy debt.

It is clear that the legislative framework to address fuel poverty issues in France is primarily reactive and aimed at resolving crises resulting from unpaid bills. Preventative action to avoid fuel poverty and offer a more sustainable approach to affordable warmth is not a major factor in policy development at the national level and there are minimal resources available for programmes to anticipate and resolve potential problems. Given the imminent opening of competitive energy markets it may be reasonable to anticipate that there will be losers in the market and that this will lead to increased numbers of households for whom energy bills are unaffordable and debt is unavoidable. In such a case, a new approach will be necessary to prevent increased incidence of fuel debt through new programmes of advice and information, and financial assistance to improve the heating and insulation standards of properties occupied by vulnerable households. The policies of three ministries are key to fuel poverty issues.

The Ministry of Employment, Social Action and Housing

The law governing a national commitment to housing standards (ENL) establishes the legislative framework of the national policy for housing and strengthens that element of the plan for social progress. This law aims to improve universal access to a comfortable and healthy dwelling. Some elements of the plan address aspects of fuel poverty:

• Mechanisms to reform allocation of social housing in favour of vulnerable households
• A ban on disconnection from essential services (water, electricity, gas) during the winter period for disadvantaged households
• Programmes to eliminate unacceptably poor housing
• Reduction of VAT from 19.6% to 5.5% applicable where the property is being connected to a district heating network (previously it had been 19.6% whereas connection to gas and electricity networks is taxed at 5.5%). In the case of heat supplied through a district heating network and where more than 80% of the fuel source is biomass, VAT is fixed at 5.5% in comparison with the standard rate of 19.6%.

The Ministry of Transport, Equipment, Tourism and Sea

This ministry is responsible for standards relating to the construction and thermal properties of residential buildings.

Ministry of Economy, Finance and Industry

This ministry develops and implements Government policy relating to energy and mineral raw materials. This ministry also has responsibility for management of the White Certificate (see below) and for fiscal legislation. A number of different policy instruments that impact in some way on fuel poverty originate in these ministries:

Mechanism for reducing the consumption of energy: the white certificates

The White Certificates were instituted by the law of the 13th of July 2005. The aim is to achieve energy savings in the residential and commercial sectors where potential savings are significant. The mechanism involves an obligation, set by the ministry, on energy suppliers to achieve predetermined levels of energy saving. The objective is to achieve cumulative energy savings of 54 TWh over a three-year period. The first phase runs from the 1st of July 2006 to the 30th of June 2009. Energy suppliers are free to select whatever actions they wish in attaining their target energy savings. Programmes might involve information and advice campaigns or financial incentives and subsidies to promote the purchase of energy efficient appliances or equipment etc.

The thermal regulation and energy performance labeling of buildings.

Every five years, decrees on the thermal characteristics and energy performance of new constructions are implemented. The most recent thermal regulation 2005 (RT2005), was introduced by the decree of the 27th of July 2006. It implements the European Directive on Energy Performance of Buildings which has applied to any construction project since the 1st of September 2006. RT 2005 has a primary objective of improving the energy performance of new buildings by 15% compared to the 2000 thermal regulation (RT2000), in which the average threshold for energy consumption was 100 kWh/m²/year. The regulations enforce a number of key requirements including thermal insulation, a high-energy efficiency boiler and storage heating in place of electric fires and improved insulation for district heating networks.

The RT 2005 ranks Energy Performance of Buildings labels:
• “High energy performance” equates to an energy consumption reduction of 10% over the conventional energy consumption of RT 2000.

• “Very high energy performance” equates to an energy consumption reduction of 20% over the conventional energy consumption of RT 2000. The Ministry of Equipment is introducing another label that is called “low energy” and refers to the “Effinergie” label, for which the average energy consumption is fixed at 50 kWh/m²/year. This label is applicable to both new and existing buildings.

**Tax credit for the purchase of renewable energy equipment and energy saving materials**

The tax credit is a financial incentive, which allows households to deduct from their income tax a portion of expenditure used to improve the energy efficiency standards of their home. The tax credit is applicable to the main home and for the purchase of equipment or materials – however labour and other installation costs are not allowed.

The tax credit and eligible measures are:

- 15% for low temperature boiler
- 25 to 40% for condensing boiler; thermal insulation materials; heating controls;
- 25% of the connection costs to a district heat network running mainly with renewable energies or co-generation;
- 50% for hot water and heating systems powered by solar energy; photovoltaic systems; electrical systems powered by wind, hydro or biomass energy; hot water and heating systems using biomass; and heat pumps of particular specifications.

**Energy performance of existing buildings.**

The European Energy Performance of Buildings Directive is also implemented in France in relation to the wider housing stock. To increase consumer awareness of energy consumption in dwellings, the article L.134.1 to L.134.5 of the code of Construction and Housing introduces a requirement for an energy audit of a domestic property at the point of sale (effective from the 1st of November 2006), or construction or rent (effective from the 1st of July 2007). The energy audit is seen as an essential tool in communicating the scope for energy efficiency improvements to the dwelling by displaying, in a readily comprehensible way, the energy performance of the building (energy consumption, CO2 emissions and annual energy costs). The audit is supported by a number of recommendations for cost-effective remedial actions to improve the energy performance of the property.

**National Agencies**

**ANAH**: The National Housing Improvement Agency offers subsidies to improve standards in owner-occupied housing and private-rented housing. Subsidies are payable to householders and landlords who carry out improvement works to their homes (provided they satisfy certain criteria). Grant-aided improvement works include:
 Improvements to the dwelling’s security, amenities, health and safety and access and suitability for persons with some form of physical disability

To save energy and to improve acoustic insulation The amount of the subsidy varies according to the circumstances of the owner:

For owner-occupiers, it is generally 20% of the cost of the works, with an upper limit at €13,000 although the subsidy can be as high as 35% for owner occupiers on very low incomes.

For property owners who are landlords, the rate of subsidy is 15% of the amount of the works. The subsidy to the landlord can be 35 to 45% if the dwelling is situated in a “programmed operation of building improvements” (OPAH in French); 40 to 70% in cases where works are part of a social programme to improve housing conditions for disadvantaged families or individuals (PST); or 70% if the owner undertakes to let the post-improvement property at a controlled rent (ANAH social).

ANAH also offers subsidies for home improvement works where low-income households contribute their own labour, where feasible, to measures specified by an agreed agency (see section on self-retrofitting works).

ADEME: The French Agency for Environment and Energy Management is a public body operating under the authority of three ministries: Ecology and Sustainable Development, Industry and Research. The main missions of the agency are to initiate, encourage, co-ordinate, develop and implement action for environmental protection and energy saving. ADEME also undertakes projects involving evaluation, advice and assistance on behalf of different target groups including: public administration, private and public enterprises and the general public.

In relation to fuel poverty, ADEME’s priority objective centres on energy efficiency improvements in dwellings occupied by low-income and other vulnerable households, with the aim of providing affordable warmth for all. The approach in delivering this objective varies dependent on the scale of the intervention. At a local level, possible interventions include home visits and provision of advice and information to individual households, undertaking energy audits and, as appropriate, carrying out practical energy efficiency improvements. Supplementary work programmes include information and training targeted at social workers and other organisations involved in housing. On a national level, in addition to the information, training and assessment skills that are the basis of local action, national partnerships must be initiated and fostered to facilitate co-operative working on innovative projects and pilots.

ANRU (National Agency for Urban Renewal): This agency was created in 2004 as a means of delivering the huge levels of investment required for the renewal of those areas of social housing districts in the worst condition. The programme aims to construct 250,000 social sector dwellings, to demolish a similar number and to undertake major remedial works in a further 400,000 by 2013. The public authorities therefore have potential access to a highly effective mechanism for the promotion of energy efficiency in social housing (in both new and existing dwellings) and, simultaneously, to redress the carbon balance of entire urban areas.
districts (as a result of action on wider energy efficiency areas such as local transport). But this opportunity is not being taken. The massive energy efficiency potential presented within both new-build and retrofit are not maximised due to a lack of political will on a national scale.

C. Low Income Programs in Spain

According to the EPEE report concerning fuel poverty and low income energy programs, Spanish legislation has never recognized fuel poverty as an issue. There have been minimal efforts to implement building codes that would improve housing standards and energy efficiency requirements. However, little has been done with regard to providing energy assistance to households in Spain because energy is considered to be inexpensive and fuel poverty is not a common problem. The following excerpt was taken from the report entitled “Detailed report on the different types of existing mechanisms to tackle Fuel Poverty.”

Fuel poverty is not formally recognised and defined in Spain although some studies show that it has some of the poorest housing and highest levels of fuel poverty in Europe6. Instances of what might be considered fuel poverty are dealt with in isolation meaning that it is primarily an issue for the voluntary sector and municipalities who are the general sources of assistance for low-income and other vulnerable households. After analysing national, regional and local circumstances it is clear that fuel poverty is not considered an issue of significant social concern. At a national level, legislation on housing conditions has been introduced in recent years. For example, stricter national legislation on building was introduced in 2006 (Código Técnico de la Edificación). At a national level level, housing subsidies are predominantly for the purpose of meeting housing costs (rents) and not to improve housing conditions generally and energy efficiency specifically. At a regional level, there are Social Emergency Subsidies which can include paying energy bills in case of extreme necessity but, for the most part, these subsidies go to pay rents represent a greater part of the household budget than energy costs. At a local level, social workers identify household problems and approve, if necessary, a social subsidy to help resolve any domestic difficulties. Evidence from many social workers in different municipalities indicates that the number of households seeking assistance related to fuel poverty is not considerable. Social workers consulted consider that energy is cheap in Spain and that there are more important domestic difficulties such as paying rent. This view is shared by the wider voluntary sector, which takes the view that demands on resources attributable to fuel poverty is not significant.

These views and experiences explain the failure of the Spanish Government to recognise and act on fuel poverty; if the problem is not seen as a major issue at local or regional levels then it cannot be taken up as a serious social problem at a national level. Fuel poverty is not consistently identified and defined in all European countries, but in Spanish legislation the problem is not even recognized.
Fuel poverty in Spanish legislation

- **Directive 2003/54/CE of the European Parliament and of the Council concerning common rules for the internal market in electricity and repealing Directive 96/92/EC.** This Directive has been transposed to the Spanish legislation as RD1454/2005 (an adaptation of “Ley 54/1997”) and although it refers to protection of vulnerable consumers, it does not consider the issue in any depth.

- **Directive 2002/91/EC of the European Parliament and of the Council on energy performance of buildings** has been partially transposed to the Spanish legislation (RD47/2007) with new regulations related to energy efficiency in new buildings. These measures will indirectly impact on fuel poverty to the extent that they improve housing conditions but they do not address fuel poverty as a separate social phenomenon. Since neither legislation nor social policy recognise fuel poverty it is axiomatic that there cannot exist a formal definition of the problem. Until fuel poverty is recognized it cannot be defined and quantified along the lines of other countries such as the United Kingdom which considers a fuel-poor household as one needing to spend more than 10% of its income on all fuel use and in heating the home to an adequate standard of warmth (21oC in the living room and 18oC in other occupied rooms).

Some Spanish Government Departments have indirect involvement with fuel poverty.

**Industry, Trade and Tourism Department**

The department is responsible for energy legislation and transposition of European Directives on energy. Spain has transposed EU Directive 2003/54/CE but without applying specific measures to “vulnerable customers” despite this being specifically required in the Directive. The department has partially transposed EU Directive 2002/91/CE related to housing standards by means of Código Técnico de la Edificación (Specific rules for dwelling), RITE (Regulation of thermal performance of dwelling) and energy certification procedures for new dwellings.

**Social Services Department**

The department has no Fuel Poverty Action Plan since the issue is not recognized by the Spanish Government. There are special subsidies available to low-income families but these generally comprise grants to help pay housing costs or to pay for food.

**Health Department**

Although some studies have suggested that Spain has one of the highest winter mortality rates in Europe, the Health Department has no special programmes to address the problem. Paradoxically, the Spanish Government does have a programme to tackle excess summer mortality which is seen as an increasing problem and which has received significant media coverage. The National Plan for Preventative Action on the Health Effects of Excessive Temperatures (Plan Nacional de Acciones Preventivas de los Efectos del Exceso de
Temperaturas sobre la Salud). The plan explicitly states that unaffordable cooling costs are a factor in the incidence of summer mortality.

Regional Government - Social Services Department

This department delegates responsibilities to local authorities in each municipality since, in Spain, issues that may be relevant to fuel poverty are dealt with on an individual basis. In most of the Spanish regions there is a source of assistance called “Social Emergency Subsidies”; these are direct payments made where there is a need to alleviate financial difficulties in families such as energy debts or bad housing conditions. The amount of this subsidy depends on the cost of the demand or the degree of urgency. Consumer protection: Consumer associations have not as yet developed any procedures for dealing with fuel poverty because the issue has virtually no profile in Spain. If energy consumers have never requested that consumer bodies become involved in protecting their interests there is no motivation for intervention in energy related issues. After contacting some national and regional consumers associations (CECU, ASGECO, OCU, OCUC...) the conclusion is that they are not interested in this aspect of consumer welfare until they receive requests for assistance.

D. Low Income Programs in Finland

In stark contrast to many other jurisdictions, Finland takes a rather minimalist approach regarding low-income energy assistance programs. However, this should not be interpreted as meaning that Finland does not have a policy response to the problem of energy affordability. Rather, the country has taken a more comprehensive approach and does not limit itself to rate assistance or energy efficiency programs for low-income customers. According to a July 2008 study entitled “Energy Poverty in the EU,” Finland does not have a definition for the terms “energy poverty” or “vulnerable customers.” The report describes Finland in the following manner:

- The concept of energy poverty is practically unknown in Finnish policy making. The literal translation of “energy poor” is used in some nutritionist’s work, but in totally different meaning. The only appearances of “energy poverty” in policy documents are in the Finnish translations of the related documents by European Parliament.

- One may ask why a cold country such as Finland is not interested in the issue of energy poverty. A paradoxical answer can be found in the article by Professor Nayha, “Environmental temperature and mortality.” He shows how people living in cold climate typically learn to know how to prepare themselves for cold weather, even for extremely cold weather. Therefore, the problem of deaths due to cold weather is often a problem more of peoples living in milder climates.

- Of course, there are groups that are vulnerable to cold weather in Finland, too. The most typical group is homeless people. Their number is estimated to be between 5,000 and 8,000 in a population of 5.2 millions. The number has been declining in recent years. Many of the homeless people are problem drinkers, which increases risks even
more. On the other hand, it is extremely rare that a person of any age, who has permanent residence and normal health and senses, would suffer lethally of cold weather in Finland.

Facts and Figures:

- 3% of a Finnish poll in 2006 said that electricity services were not affordable in their country.

- The electricity price index in Finland for households rose by 25% between January 2004 and January 1995. Towards July 2005, it has again lowered by 5%.

- In 2007, 49% of Finns slightly disagreed or strongly disagreed that competitive electricity markets have lowered the price of electricity. A total of 87% of Finns were certain or quite certain that rising electricity prices can be attributed to the “profit seeking of electricity companies.”

- In 2006, Finnish households spent on average 28% of their expenses on housing and energy. This proportion is 29% for one person households and 31% for single parent households; hence it is not radically different for low-income groups than for the mainstream.

- In Finland, the EU-SILC data indicate that about 4 percent of households have had at least once a year unpaid bills on housing-related expenditure (electricity (often including heating), water, other heating expenses, etc.). About 1 percent of the respondents in 2006 said they could not afford heating their homes as much as they would have wanted. About 8 percent said their apartment or house is too cold in winter, and respectively, 19 percent complained about excessive heat in summer. Many families keep low temperatures in their homes in the interest of energy saving, not because they cannot afford heating more.

- An additional aspect of energy poverty in a sparsely populated country is the energy needed for transport (either public transport fees or purchases of gasoline for shopping, using health services, etc.) in the more remote areas. There is no information on the prevalence of this kind of energy poverty, either.

- As for the winter deaths, the article by Professor Nayha shows a clear monthly variation in mortality and a link between mortality and temperature. The number of deaths due to low temperature has varied between 65 and 84 in the 2000s, peaking in the winter months from December to March. This makes a mortality rate of 1.25 per 100,000 and covers a bit more than 1 per mille of annual deaths in the country.

Finland offers the following “social inclusion measures” related to energy assistance for low-income consumers:
• The Social Services Department provides social benefits for low income households. In addition to a basic amount, living expenses can be granted for utility expenses including electricity and gas.

• General housing allowances can be granted for all households. Applications are sent to the local social services authority.

• Energy bills are one of the acceptable items in the last resort social assistance. So, in principle, nobody needs to survive badly of cold weather because of lack of money to pay energy bills. For some groups of elderly people, there are special funds available for technical improvement of their houses, to make the heating system better, more practical and more affordable.

• An important part of measures that are related to protection against cold weather are the strict regulations of buildings, their use and construction. It is practically impossible to build a new apartment for dwelling without sufficient thermal isolation (sic) and heating. The regulations aim at energy efficiency, but as a side effect protect people against cold weather and help to reduce their energy bills (but at the same time, make houses and apartments more expensive.) In a rapidly modernized country like Finland, only a small part of all dwellings are in old, non-modern buildings that may be problematic from the point of view of protection against cold weather. Many public policy measures have been taken over years to improve the energy efficiency of older houses, too.

• Repair and energy grants are aimed at reducing energy consumption and CO2.

In summary, it appears that Finland has addressed its heating and cooling issues through a comprehensive public policy response which includes social assistance programs, general housing allowances, building codes and regulations that encourage modern construction, and special funds for elderly persons to make their dwellings more energy efficient. However, many of these policies are not targeted specifically at low-income customers, but are designed to benefit all citizens of the country.

E. Low Income Programs in Australia

Australia consists of six states (New South Wales, Queensland, South Australia, Tasmania, Victoria, and Western Australia) and two major territories (the Northern Territory and the Australian Capital Territory). Concentric’s research report focuses on low-income energy policies and programs in Western Australia because that state provided the most information concerning how their low-income program functions and the underlying philosophy and principles for implementing those
programs. For a complete overview of the LIEPs offered in Australia, please refer to Appendix A of this report.

In June 2007, the Minister for Energy in cooperation with the Premier, Treasurer and Ministers for Housing, Water and Child Protection formed a working group whose purpose was to identify and report to the government of Western Australia on ways in which government owned essential service utilities, welfare agencies and government agencies can further improve the delivery and coordination of essential services to the community’s most financially and socially disadvantaged families. The working group presented a written report in December 2007 called “Utilities Essential Services Hardship – Public Issues Discussion Paper.” The following section summarizes, by topic, the major findings and conclusions of that report.

F. Electric and water service are essential, and for those in financial hardship, gas service is also essential because once gas is used for heating and cooking, it is costly to replace appliances and change wiring and plumbing.

G. Financial hardship is difficult to define because the demographics of vulnerability and disadvantage change. For example, individuals move in and out of financial crisis subject to a range of external factors, including accidents, adult onset health problems, family breakdown, labor market developments, and changes to social security arrangements. However, those in financial hardship share some common characteristics. The Department for Child Protection listed the following series of factors related to financial hardship: (a) being a single parent; (b) being on income support, which makes it more likely the person would be home during the day and consume more energy for heating/cooling; (c) being indigenous; (d) being female; (e) experiencing issues with physical or mental health, substance abuse, family violence, or homelessness; (f) having low education levels and lack of budget skills; and (f) being socially isolated.

H. Hardship policies of utilities need to filter out those customers who do not pay their utility bills for reasons other than financial hardship. The Western Australian Code of Conduct for the Supply of Electricity to Small Use Customers defines financial hardship as: “a state of more than immediate disadvantage which results in a residential customer being unable to pay an outstanding amount as required by a retailer without affecting the ability to meet the basic living needs of the residential customer or a dependant of the residential customer.”

I. The same Code of Conduct distinguishes between payment difficulty and financial hardship effectively in terms of the duration of the situation. For example, a person who cannot pay their electricity bill until their next paycheck arrives would be a person in payment difficulty, not financial hardship.
J. The Working Group concludes that those persons having the intention but not the financial ability to pay their utility bills, without affecting their ability to meet their individual or families’ basic living needs, are in utility hardship.

K. The Working Group finds that renters, and in particular renters of public housing, are more likely to be at risk of suffering utility hardship.

L. Given the small percentage that energy expenditure represents of total household expenditure, solving essential service financial hardship in isolation will not solve a customer’s total financial hardship. However, there is a very strong correlation between households experiencing difficulties paying utility bills and financial hardship.

M. Based on official electric disconnection figures and other evidence it is estimated that in Western Australia about 3,300 households annually (or approximately 0.3 per 100 electricity customers) are potentially in utility essential services hardship. However, disconnections figures do not provide an accurate indicator because they include households that have the financial capacity, but not the intention, to pay for service.

N. In terms of developing a policy framework, the Working Group determined that a shared responsibility model was the most appropriate response. This approach reinforces the mutual social obligation principles found within current social policy. Under this model, utilities, the government, community groups, and customers should all share responsibility for assisting customers in financial hardship. The following section outlines the basic principles of the shared responsibility model.

- Customers receive utility services and are obliged to pay their bills and to identify themselves to utilities and NGOs if they are having difficulties paying their bills.
- Customers in hardship should be encouraged to engage with utilities and NGOs.
- Utilities should support customers in financial hardship through a hardship program.
- Governments determine social policy priorities and establish agencies and arrangements to fund, implement, and administer hardship policies that are not in the commercial interest of utilities. Where a customer has insufficient income for life’s essentials, appropriate income support should be provided by the Federal Government.
- NGOs should assist in the identification of customers in financial hardship and provide information on, and assist customers’ access to, available support.
- A best practice shared responsibility model should seek to prevent the continuation and escalation of customer hardship and ensure access to essential services.
Finally, the Working Group observes that the government is responsible for determining social policy priorities. Therefore, they recommend the government should determine a common set of utilities hardship principles, including consideration of the following:

- Utility hardship assistance is a mutual social obligation, shared between customers, the energy industry, governments, and the broader community;

- Government should provide the policy framework and programs to support customers, utilities, and NGOs to address utility hardship;

- Utility hardship regulation should not be prescriptive but outcome focused;

- Customers have a responsibility to pay for their utilities and utilities are entitled to expect that customers should pay utility bills;

- Utilities and NGOs should assist customers experiencing hardship;

- Customers should identify themselves to utilities and NGOs if in hardship;

- Hardship assistance should apply to customers who have the intent but not the capacity to pay;

- Utilities and NGOs should have the skills and resources to assist utility hardship customers/clients;

- Government and utility hardship assistance policies should be developed in consultation with key stakeholders; and

- Government, NGO, and utility assistance should be transparent, periodically monitored, and publicly reviewed.

**H. Low Income Programs in New Zealand**

The New Zealand Electricity Commission has issued a series of guidelines to assist low income domestic customers. This section of the report summarizes guidelines issued by the Electricity Commission (“EC”) in June 2005 and January 2008. It should be noted that the EC states that these guidelines are intended to be advisory. In line with its objective to encourage rather than regulate, the EC recommends that these guidelines be followed. In June 2005, the EC defined low-income for purposes of these guidelines to primarily include the following types of consumers:
• Beneficiaries, National Superannuitants, and others whose low income or personal circumstances, whether temporary or permanent, make it difficult for them sometimes to pay their electricity bills; and

• People who meet their bill payments through sacrificing expenditure on other necessities or who cannot afford the home improvements that would allow them to use energy efficiently.

The EC presented the following recommended options to address the needs of low income energy consumers in New Zealand:

• Installation of a prepayment meter;
• Requirement of a guarantor;
• Agreement to deduct electricity payments from benefit or wages at source if a default on payment occurs; or
• Automatic payment.

The following section summarizes the various EC recommended options in more detail.

**Prepayment meters:** Retailers should provide prepayment metering where it is technically and commercially viable in geographical areas of their choice. Retailers who are unable to provide pre-payment meters should agree to a protocol with retailers who can, to facilitate the switching of consumers who would benefit from prepayment meters.

Prepayment meters are particularly recommended as an alternative to a bond where there are separate legal parties living in a single household (e.g. student flats).

Retailers should investigate the use of prepayment meters to recover other electricity debts. For example, a certain percentage of each prepayment could go towards debts; the rest towards electricity.

**Smoothed payments:** Smoothed payment contracts are those in which consumers pay an amount based on their average monthly consumption, paying slightly more than they
consume in summer and slightly less in winter. The regular payment should be adjusted upwards if average consumption proves higher than estimated, or downwards if consumption is lower. If there is a significant surplus after the high consumption period has ended, a refund should be made to the consumer.

It is recommended that companies promote ‘smoothed payment’ contracts with frequent payment periods, especially to those on low incomes, to correspond with benefit payment dates or paydays.

**Deduction at source:** To avert disconnection, retail companies could agree with consumers to have dedicated automatic payments that cannot be subverted, or direct benefit redirection.

Retailers could co-operate with Work and Income New Zealand regarding this initiative. The payments could probably be smoothed, but this could be a matter of agreement between retailer and consumer.

**Bonds:** The EC discouraged electricity retailers from requiring consumers to post a bond, stating that “bonds should only be imposed if consumers refuse any other measure.” A bond is an up-front payment of a lump sum as a condition of some electricity agreements for connections to provide security to retail companies. In the case of non-payment of a bill, the electricity retailer can use the bond to pay off debts. There are other ways of getting security that should be used in preference to bonds. Each company should offer an alternative to a bond for all consumers. If a company requires a bond:

- The customer must be informed of the reason for the decision;
- The amount of the bond should not exceed $150 (estimated average household consumption for a month); and
- The bond should normally be refunded after 12 months of the consumer paying all bills on time. If the period is extended, a reason should be provided to the customer.

In assessing the relative benefits and costs of its proposal, the EC writes as follows:
The benefits of the proposal are: (a) fewer disconnections; (b) use of bonds to decrease; (c) credit risk to retailers to diminish; (d) consumers with liquidity issues to face less volatile bills; (e) fewer loans and cash grants made by social agencies to cover payments for electricity connection; (f) retailers to have reduced costs associated with the disconnection process; (g) each retailer to be operating under the same set of assumptions; and (h) electricity supply to be maintained.

The costs of the proposal are: (a) it is possible that prepayment meters will hide the disconnection problem, though at least it will not be as costly to reconnect supply; (b) retailers may have to spend more time negotiating with consumers who have difficulty paying, leading to additional costs; (c) retailers may have additional costs related to contacting consumers prior to disconnection; and (d) there will be compliance costs associated with redirection of income or benefits.

The EC concludes that the overall assessment of benefits and costs supports the proposal. It believes that the introduction of these guidelines will assist in achieving its objectives of fair delivery of electricity to all consumers, and believes that guidelines are the correct approach at this point in time, though it reserves the right to consider regulations if its objectives are not met.

In January 2008, the New Zealand Electricity Commission issued additional guidelines on arrangements to assist low income and vulnerable consumers. Specifically, the EC defined the terms “low income consumer” and “vulnerable consumer” for purposes of their guidelines as follows:

**Low-income consumers:** Those consumers whose low income, whether temporary or permanent, makes it genuinely difficult for them to pay their electricity bills.

**Vulnerable consumers:** A consumer is vulnerable if for reasons of age, health or disability disconnection of electricity presents a clear threat to their or a member of their household’s health or wellbeing.

At the same time, the EC discussed the payment alternatives which it expects electricity retailers to make available to low-income energy consumers in New Zealand. Specifically, the EC wrote:
Retailers must offer consumers who are having difficulty paying their bills a range of alternatives to standard monthly payments. They must offer arrangements to recover debt within a reasonable time frame that do not create an adverse credit situation for the retailer and minimize hardship for the consumer. Payment options should include prepayment meters, smoothed payments, and redirection of income.