



COMMENTS OF THE ELECTRICITY CONSUMERS RESOURCE COUNCIL (ELCON) SUBMITTED TO THE ENVIRONMENTAL PROTECTION AGENCY ON IMPLEMENTATION OF TITLE IV, SUBTITLE D – INDUSTRIAL ENERGY EFFICIENCY, OF THE ENERGY INDEPENDENCE AND SECURITY ACT OF 2007 (PL 110-140), JULY 14, 2008

The Electricity Consumers Resource Council (ELCON) is the national association of large industrial electricity consumers. Established in 1976, our members come from virtually every segment of the manufacturing community. All ELCON members have operations in several states. Most members generate electricity on-site, some through traditional combined heat and power, some through other technologies, and many members sell power onto the grid. For all of those reasons, ELCON members are vitally interested in the implementation of Title IV, Subtitle D, of the Energy Independence and Security Act (EISA) of 2007, regarding the capture of waste heat at industrial facilities to produce power.

America's manufacturers are committed to improving their energy efficiency and have a commendable track record in that endeavor. They have undertaken this effort for at least two reasons. First, companies' products compete in world markets with producers from all over the globe. By reducing their energy costs through increased efficiency, manufacturers reduce their production costs and make their products more competitive. Second, companies are very aware that our fuel resources, though not fully tapped, are nevertheless limited. We should not be using today the resources we will need tomorrow.

One statutory requirement tasked to EPA by EISA is the compilation of a Registry of Recoverable Waste Energy Sources, which presumably will list industrial facilities that have the potential to capture waste heat to produce power.

Recommendation 1: Registration Should be Voluntary

ELCON strongly recommends that inclusion on the Registry be voluntary. As stated, America's manufacturers are often competing in global markets with suppliers from other countries. They are already burdened with a myriad of compliance costs associated with perhaps hundreds of federal regulations. Our purpose is not to judge the wisdom of those regulations, but merely to state what should be obvious. It is a virtual certainty that being listed on the Registry will, over time, require each facility to respond to various requests for information. Ignoring for the moment whether or not the requested information will be confidential business information (see below), the very process of compiling the requested data and responding to EPA requests will be time consuming and therefore costly.

If a company has determined that a particular facility will not be applying for the benefits available under this Subtitle, it follows that there is no reason to be included on the

Registry. In fact, voluntary registration will not only save the facility time and money, it will save EPA time and money since there will be less data to compile and analyze.

Recommendation 2: Both New and Existing Facilities Should be Eligible

The statute does not expressly limit its application to new waste heat recovery facilities, nor does it expressly direct its application to existing facilities. To the extent an ambiguity exists, the statute should be read in a way that will maximize the benefits of waste heat recovery, favoring its application to new, existing and modified facilities. Applying the regulations to new facilities will encourage new development, and applying them to existing facilities will encourage their ongoing operation and efficiency modifications.

Importantly, a broad application of the regulations will also avoid any detrimental impacts on competition within industries. It would be an unfortunate interpretation of the statute to reward new development, but overlook the prior early action of existing facilities that have contributed environmental benefits over the years.

By way of illustration, we offer two hypothetical companies, Widget Maker A and Widget Maker B. Both make the same product and have roughly the same production costs.

Widget Maker A has higher operating costs (labor, taxes, access to transportation, etc) but has made significant energy efficient improvements, including the capture of waste heat, to bring its total production costs down. Widget Maker B has not undertaken or achieved similar efforts regarding waste heat.

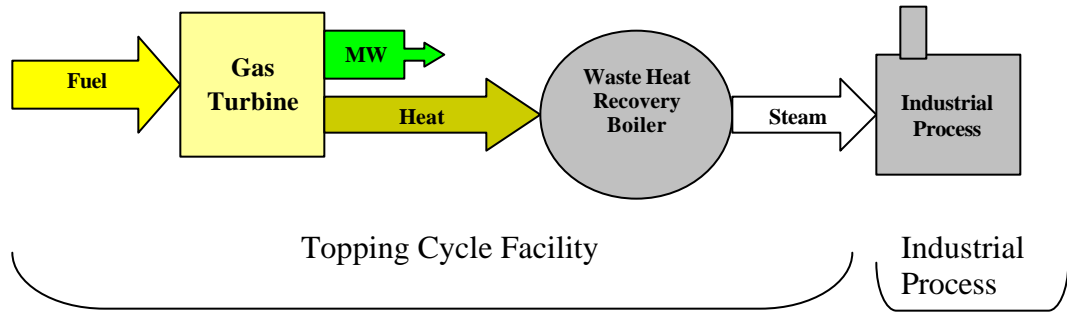
If Widget Maker B, as a new facility, is eligible to be included on the Registry and Widget Maker A is not, by extension only Widget Maker B would be eligible for the benefits available through the subsequent DOE program. Widget Maker A would in essence be disadvantaged for having acted earlier. This seems unfair on its face and we do not believe that this could have been Congress's intent.

[The following recommendations are in direct response to questions raised by EPA in its presentation to the Manufacturers Energy Group (June 16, 2008).]

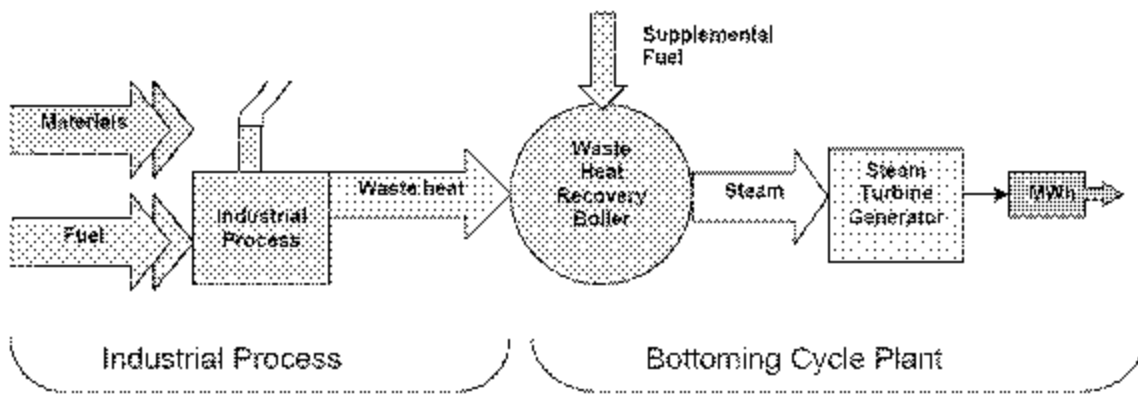
Recommendation 3: Waste Heat Recovery Should Include both Topping and Bottoming Cycle Facilities as well as Other Manufacturing Processes

Is CHP waste energy? Waste heat recovery can occur through several processes, including two combined heat and power processes, which have traditionally been referred to as "topping" and "bottoming" cycle facilities. To maximize the environmental benefits of the statute, the regulations must designate both types of waste heat recovery as subject to registration and eligible for benefits.

A topping cycle waste heat recovery facility produces waste energy in the process of power production. The waste energy, in the form of steam or other useful heat products, can be used in the manufacturing of other products. The efficiency of topping cycle plants arises from the fact that less fuel is needed to produce the same amount of electrical and thermal output than would be needed in stand-alone production. CHP can be viewed as energy efficiency on the supply side. The process can be depicted as follows:



A bottoming cycle uses waste energy from an industrial process in the generation of electricity. The efficiency from bottoming cycle plants arises from the capture of waste heat that would otherwise be vented to the atmosphere to produce electricity. This form of CHP, too, can be viewed as energy efficiency on the supply side. The bottoming cycle process can be depicted as follows:



To maximize the benefits under the statute and remain consistent with statutory definitions, regulations must make clear that both topping and bottoming cycle facilities are eligible for benefits.

In addition, every effort should be made to include industrial gases or emissions which can be reused as a fuel to generate electricity. As simply one example, an automotive paint shop (as well as other industrial processes) emits Volatile Organic Compounds (VOCs). These VOCs can be concentrated, re-formed into hydrogen, and/or burned as a

fuel in a fuel cell or elsewhere. Additional examples exist in other manufacturing processes and we urge EPA to ensure that all processes with such recovery be included.

Recommendation 4: Respect for Confidential Business Information Leads to Voluntary Registration

How should Confidential Business Information (CBI) be treated? Specific energy inputs and outputs for each facility, as well as details regarding operational costs, are often highly guarded. Companies do not want their competitors to know the details of their specific production processes. For many valid reasons companies will decline to provide this information to any public source unless there are special procedures to protect confidential and commercially sensitive information. This may well impede EPA in its attempts to determine potential waste heat.

Voluntary inclusion on the Registry would solve this problem by ensuring that any facility could choose not to expose any of its operating data to the public. A fallback approach would be for EPA to utilize a third party to compile aggregated or “blind” data for public purposes, thus maintaining the detailed facility information confidential.

Recommendation 5: Question of “Primary Purpose” Answers Itself

How can EPA determine whether a facility is developed for the “primary purpose of making sales of excess electric power?” As an initial matter, ELCON notes that this statutory language is in response to the many urban legends about “PURPA machines,” *i.e.*, facilities that were constructed primarily to take advantage of PURPA’s avoided cost basis for compensating cogenerators and renewable power producers (although under closer examination, there were in reality very few PURPA machines).

Looking beyond the intent of this provision, it is relatively simple to determine the purpose of a facility. If the facility is a bottoming cycle plant – *i.e.*, a heat recovery steam generator and steam turbine added at the end of an existing or new industrial project – there can be little argument about purpose. This type of facility is a pure energy efficiency measure. The only question arises when supplemental firing is added to the process to increase steam generation and, consequently, electricity generation. EPA could develop a test that ensures that the majority of electricity from the facility is generated from waste heat rather than supplemental firing. If the facility is a topping cycle plant, again the analysis is fairly simple. If the facility is built and sized to meet a legitimate commercial or industrial thermal load, replacing boilers or other thermal generation facilities, there can be little doubt as to its purpose. If needed, FERC regulations and case law, revised under EPAct 2005, provide guidelines for ensuring the “beneficial use” of the thermal output.

Contacts:

John Anderson, President and CEO (janderson@elcon.org)

John Hughes, Vice President, Technical Affairs (jhughes@elcon.org)

Marc Yacker, Vice President, Government and Public Affairs (myacker@elcon.org)

Electricity Consumers Resource Council (ELCON)
1333 H Street, NW
West Tower, 8th Floor
Washington, DC 20005

202-682-1390