

MCWHIRTER REEVES **ATTORNEYS AT LAW**

Tampa Office: 400 North Tampa Street, Suite 2450 Tampa, Florida 33602 P. O. BOX 3350 TAMPA, FL 33601-3350 (813) 224-0866 (813) 221-1854 FAX

PLEASE REPLY TO:

TALLAHASSEE

September 16, 2002

VIA HAND DELIVERY

Blanca S. Bayo, Director Division of Records and Reporting **Betty Easley Conference Center** 4075 Esplanade Way Tallahassee, Florida 32399-0870

TALLAHASSEE OFFICE: 117 South Gadsden Tallahassee, Florida 32301 (850) 222-2525 (850) 222-5606 FAX CEIVED FPSU

PSC-COMMISSION CLERK

20 0

SEP

83

5

DOCUMENT

Re: Application of Cargill Fertilizer, Inc. to engage in self-service wheeling of waste heat cogenerated power to, from and between points within Tampa Electric Company's service territory. Docket No.: 020898-EQ.

Dear Ms. Bayo:

AUS CAF

CMP

CTR

ECR

GCL

OPC MMS

SEC

OTH

RECEIVED & FILED

FPSC-BUREAU'OF RECORDS

On September 11, 2002, Tampa Electric Company ("TECo") filed a package of documents containing seven "Quarterly Reports" (document nos. 09645-02 and 09646-02). Accompanying the documents was a request for confidential classification of these documents by TECo on Cargill's behalf. In the interest of providing the Commission staff and the Commissioners the opportunity to openly and fully explore the information contained in these documents, Cargill waives confidentiality with respect to the reports, but reserves the right to reassert confidentiality in the event future discovery seeks confidential information. You are hereby authorized to make the reports Tampa Electric submitted on September 11th part of the open file in this case.

In addition, TECo failed to provide Cargill's response to the mid-term report in its filing. Cargill's response to the mid-term report and Cargill's response to the seventh quarterly report are submitted with this letter. The reports lack the qualifications for record evidence, but I presume the staff wishes to use them to help in framing its recommendations to the Commission. COM

Currently, there is a motion pending to continue the pilot study until the eighth and final report is filed by TECo. This motion is supported by the sworn affidavit of Roger Fernandez, and explains the adverse circumstances facing Cargill due to the fact that the pilot program ends when one of its waste heat generators is out of service. Cargill's generator will be down while Tampa Electric's KACapacity is constrained as a result of its Fall planned maintenance, the Gannon/Bayside Plant conversion Tand Tampa Electric's commitment to firm off-system sales.

Continuing the Cargill self-service wheeling program while Cargill's application for permanent approval is being studied will enable the two year study to be completed. Further, it should result in-

MCWHIRTER, REEVES, MCGLOTHLIN, DAVIDSON, DECKER, KAUFMAN & ARNOLD, P.A.

Blanca S. Bayo September 16, 2002 Page 2

.

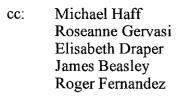
١

no lost revenue to TECo when it is supplying power under the optional purchase provision of TECo's cogeneration standby tariff. In addition, other interruptible customers will benefit from the reduction in TECo's need to interrupt or purchase power for Cargill.

Sincerely yours,

Timothy J. Perry

TJP/encl.





Sept. 13, 2002

Mr. Michael Haff Fla. Public Service Commission Division of Safety and Electric Reliability 2540 Shumard Oaks Boulevard Bldg. G Tallahassee, Fla.

Re: Docket No 001048 – EQ And Docket No 020898-EQ Cargill Self Service Wheeling

Dear Mr. Haff:

Following up on TECO's most recently filed qtrly. Report (2nd. Qtr. 2002), attached you will find some additional data, calculations and comments related to the results of the first 7 qtrs. of Cargill's Self Service Wheeling activities within TECO's territory.

I understand that TECO has requested on behalf of Cargill that all documents be treated as confidential. Cargill hereby waives the confidentiality of the information contained in the reports, but reserves the right to reassert confidentiality in the event future discovery seeks to explore trade secrets.

We will gladly answer any questions that you or other FPSC staff have regarding data as reported by TECO, and expanded upon in the enclosed attachment; and thank you for your attention to these matters.

Sincerely yours,

Roger Fernandez Utilities Superintendent Cargill Fertilizer, Inc.

Phone 813-671-6238 Fax 813-671-6149 E mail: <u>roger_fernandez@cargill.com</u>

ja 1996.es --

SEP 1 & 2001 UNA AND DOMANT AND RECEIVED Sept. 13, 2002.

ATTACHMENT A

CARGILL'S SELF SERVICE WHEELING—CALCULATIONS AND RESULTS THROUGH FIRST SEVEN QUARTERS.

The methodology used in the TECO reports is skewed toward negative results. The methodology shows an "insignificant" negative result for the first 7 quarters of the study, but in doing so completely ignores the value some of the positive aspect's of Cargill's operations and transactions. When these factors are considered the study is very favorable to Cargill's limited self service wheeling activity. The important, but omitted information follows:

1 The TECO methodology provided 0 credit for times when SSW coincided with Optional Provision Purchases. This is the time which is potentially most beneficial to other interruptible Customers and TECO's system.

When TECO sends out a notice that there is a probability that interruption may occur Cargill -if it is purchasing power at one location at that time- starts to SSW. The need to interrupt other customers is reduced and sometimes avoided by Cargill's SSW. The corresponding requirement to purchase power for some other customers under the OPP program is reduced by the amount of Cargill's SSW. A simple way to quantify the value of the reduced need for purchased power would be to use the average amount Cargill paid for OPP. The average paid per MWH for the Optional Provision Purchases of Cargill for the 1st.seven Qtrs. of Cargill's Self Service Wheeling activities was \$103.66/MWH. Subtract TECO's On Peak charges of \$51.85 from this sum to derive the OPP surcharge, it is \$51.81. Multiply the surcharge by the 1282 of coincidental SSW and OPP and you will find there is a savings of \$66,420. Cargill saved this amount by SSW. When Cargill's actions made TECO power available to other customers those customers saved as well. TECO suffered no lost revenue. It is a win, win circumstance that was not considered in the TECO report. This sum alone off sets the "insignificant" negative result shown in the TECO reports.

2 Environmental benefits from waste heat generation, CHP (combined heat and power) are also given no place on TECO's calculations.

Utilizing published estimates of the external environmental costs of electricity generation from Conventional sources it is estimated that this cost amounts to 34% of the production cost of electricity (see the attached Carnegie Mellon article). If the reports included only the fuel component of electric production cost the environmental benefits to other ratepayers and the community at large from Cargill SSW is considerable. ----34x\$23,12/MWH fuel cost x 10,780 MWH of Cargill waste heat generated SSW (and retained

in TECO's system area) ---- an estimated value of \$84,739 is obtained.

When evaluating the total impact on "Others" then a more complete and fair evaluation would demonstrate that Cargill's SSW activities within TECO's territory for the past 7 qtrs. Provided net benefits to "Others" of well over \$100,000.

It also must be pointed out that Cargill's payments to TECO for the 7qtrs. of SSW were over \$7.5 MM, and continued to include the same demand charge payments, since SSW between our QF facilities does not change demand charges.

(continued)

Even though it is obvious that in terms of TECO's total system (SSW = about 3 one hundredths of one percent of TECO's yearly sales), and it's revenues this SSW activity results are statistically insignificant (please see 5^{th} . par. of TECO's "Mid-Point Summary" report); it nevertheless can be concluded that in Cargill's unique set of circumstances is a win/win situation for others, the Gen. Body of ratepayers, and Cargill's operations as well.

ι,

pg. 2

Carnegie Mellon The External Air Pollution Costs GREEN OF Industrial Production

H. Scott Matthews. Chris Hendrickson, Lester Lave

Introduction:

Despite many years of environmental regulation, significant levels of air pollution are generated by the provision of goods and services in the United States. In 1992, these externalities caused an estimated \$180 billion of such damages in the U.S.

To reduce environmental damage, analysis tools such as Life Cycle Assessment (LCA) have been developed to better understand the total impacts of products and processes. These tools consider the effects associated with every stage in the life of a product, including raw materials extraction, component fabrication, assembly, delivery, use, and disposition. However, LCA methods are hindered by boundary problems, circularities among industries, and the difficulty of assessing emissions inventories for decision making.

Approach:

We use the EIO-LCA model developed at Carnegie Mellom to solve the boundary problem. EIO-LCA is a Looutief input-output (IO) model augmented by environmental impact information to determine the direct and total supply chain effects resulting from the production of the 500 commodity sectors contained in the Department of Commerce's 1992 IO table. Toward this effort, we have generated a substantial data set linking releases of criteria pollutants and greenhouse gases with manufacturing activities in each sector. The result is an assessment, rather than simply an inventory, of environmental effects.

The total air pollution releases found for each commodity are combined with a range of environmental damage valuation studies to estimate the external costs of these activities. We concentrate on air pollution because consistent valuations are not available for other environmental effects. Our results include consideration of supply chain effects as well as the direct effects from producing commodities.

As shown in the following table, the production of electricity generates 34 cents of external costs per dollar of production, but the average commodity generates less than 4 cents. These values could be incorporated into an accounting or pricing system to show corporate decision makers or policymakers the full costs of materials, product, and process choices. A web site has been created at http://www.eiolca.net/ that shows users the supply chain impacts of production in both economic and environmental terms. The external cost estimates are shown as well.

Commodity Sector	External Cost	1992 Output
	Percentage	(billions)
Electric services (utilities)) 34%	\$171
Petroleum refining	11%	\$132
Crude petroleum / nati ga	s 12%	\$105
Natural gas distribution	15%	\$77
Trucking services	6%	\$157
Retail trade	2%	\$523
Wholesale trade	1%	\$569
Industrial chemicals	7%	\$89
Blast furnaces and steel n	nills 14%	\$42
Eating and drinking place	es 2%	\$281
Average over all 500 sec	tors 4%	\$22

When these results are combined with the Consumer and Producer Price Indices as well as the Consumer Expenditure Survey to determine the external costs associated with buying and selling commodities, we find that the average dollar spent by consumers generates about 3 cents of external cost, while producers generate 5 to 9 cents. The results show that the average American household's spending generates roughly 40 tons of carbon dioxide equivalent releases per year. Such a method could be followed by governmental agencies to adjust for environmental damage in the publication of such indices.

Finally, using our data set of current emissions, and the findings above, we compare the effects of various policies to reduce emissions, including command and control and market-based initiatives. Market-based initiatives are projected to save billions of dollars in expenditures if enacted for sulfur dioxide, nitrogen oxides, and volatile organic compounds. In addition, if new regulations were set to reduce external costs, significant improvements over current levels would result with savings in the billions of dollars.

Financial Support:

National Science Foundation U.S. Environmental Protection Agency Department of Energy Green Design Initiative consortium of companies

For more information contact:

H. Scott Matthews	
(412) 268-3645	
Email: hsm@cmu.edu	

Chris Hendrickson (412) 268-2941 Email: cth@cmu.odu





CARGILL Fertilizer, INC.

8813 Highway 41 South • Riverview, Florida 33569 • Telephone 813-677-9111

April 30, 2002

Mr. Michael Haff Fla. Public Service Commission Division of Safety and Electric Reliability 2540 Shomard Oak Boulevard Bldg. G Tallahasee, Fla.

Re: Docket No 001048 – EQ Cargill Self Service Wheeling

Dear Mr. Haff:

Attached you will find some additional data, calculations and comments related to the results of the first year of Cargill's Self Service Wheeling activities within TECO's territory; which we wish be made part of the record on this docket.

We have also shared this information with TECO; and would gladly answer any questions that you or other FPSC staff have regarding the 1st, year's comprehensive results as reported by TECO, and expanded upon in the enclosed attachment.

Sincerely yours,

a ge

Roger Fernandez Utilities Superintendent Cargill Fertilizer, Inc.

Phone 813-671-6238 Fax 813-671-6149 E mail: roger_fernandez@cargill.com

> SEP 16 2001 U. al Con - exp RECEIVED

Attachment A

CARGILL'S SELF-SERVICE WHEELING - - CALCULATIONS AND YEAR END RESULTS

Methodology as Reported is Skewed to negative results and does not value some of the positive aspects of Cargill's operations and transactions as follows:

1 Methodology provided 0 credit for times when SSW coincided with Optional Provision Purchases; which is the time at which it is potentially of most benefit to other interruptible customers and TECO's system.

The average paid per MWH for the Opt. Prov. Purchases of Cargill for the year was \$110.56/MWH; if substracted from TECO's On Peak charges \$50.09 and multiplied by the 901 MWH of coincidental SSW and OPP; an estimate of this value of \$54,383 can be obtained.

2 Environmental benefits from waste heat generation, CHP (combined heat and power) are also given no place in the methodology.

Utilizing published estimates of the environmental costs of electricity generation from conventional sources --- 34% of the production cost of electricity—(.34 x \$23.12/mwh) and the 8580 MWH of waste heat generated SSW (and retained in TECO's system area) an estimated value of \$67,446 is obtained

When evaluating the total impact on "Others" then a more complete and fair evaluation would demonstrate that Cargill's SSW activites within TECO's territory for the past year provided net benefits to "Others" of about \$100,000.

It also must be pointed out that total Cargill payments to the host utility for the year of self-service wheeling were over \$4.5 MM, and exceeded those of the year prior to the test SSW period.

Even though it is obvious that in terms of TECO's total system and it's revenues this SSW activity results are statistically insignificant; it nevertheless can be concluded that in Cargill's unique set of circumstances SSW is a win/win situation for others, the utility, and Cargill as well.