



ACADIAN CONSULTING GROUP

Assessment of the Net Economic Benefits of the Proposed Fishermen's Atlantic City Windfarm

Prepared for the New Jersey Division of Rate Counsel
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David E. Dismukes, Ph.D.
Acadian Consulting Group

PUBLIC VERSION

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Executive Summary

- Currently, FACW is proposing to use **six (6) 5 MW "direct drive" turbines** supplied by Xiangtan Electric Manufacturing Group, Ltd ("XEMC"). **No direct drive turbines are currently operational anywhere in the world**.
- a subsidiary of XEMC New Energy, **will take a --- percent equity position in the FACW project**.
- XEMC New Energy is owned primarily by XEMC Group, a company that is primarily owned by a provincial government entity that is part of the Peoples' Republic of China.
- FACW is proposed to be built 2.8 miles offshore, and if built, the project could be the first offshore wind farm in the United States.

- While the **total nameplate capacity of the project could be listed as 30 MW**, the project developers note that FACW will operate at a **nominal 24 MW** capacity rating.
- The project is anticipated to cost $ million, which includes an anticipated Section 1603 grant from the U.S. Treasury of $--- million.[1]
- FACW is currently requesting ratepayer financial support of some $ per offshore renewable energy credit ("OREC"). The amount will increase by percent per year and have a termination value of $ per OREC.[2]
- The net present value ("NPV") of the anticipated stream of ratepayer financial support for the project is estimated to be $347.4 million.

Note: [1,2] The cost of the FACW project and corresponding proposed OREC price used in this report is based upon the proforma provided in response to data request RCR-PF-3 and the rate impact analysis provided in response to data request RCR-PF-10. These files are the most recent complete financial analysis that is consistent with state statute received to date. These files are based on a MW facility with a total cost of $ million and a starting OREC price of $ MWh. Since that time, FACW has provided additional OREC scenarios in discovery to Rate Counsel. However, those OREC proposals were not accompanied by the required proforma and cost accounting analysis as outlined by N.J.A.C. 14:8-6.5.

Executive Summary (continued)

- The FACW project is estimated to likely **impose over $286 million in rate increases** to New Jersey ratepayers in NPV terms.
- This rate increase will result in a $**477 million NPV reduction in New Jersey economic output**, a cumulative reduction of some **29,902 jobs**, a $232 million NPV reduction in New Jersey wages, and a $330 million NPV reduction in other value added components of the economy.
- The FACW project construction and operations expenditures **will create a number of offsetting, but limited, positive economic impacts** relative to those created by the project's ratepayer subsidy.
- The construction and operation of the FACW project is estimate to generate over **$19 million NPV increase in New Jersey economic output**, a cumulative increase of some **135 jobs**, a **$7 million NPV increase in New Jersey wages**, and a **$11 million NPV increase in other value added** components of the economy.
- **The FACW project is estimated to result in negative net economic impacts**.
- The FACW project is estimated to result in a **$452 million NPV reduction in New Jersey economic output**, a cumulative reduction of **some 29,661 jobs**, a **$223 million NPV reduction in New Jersey wages**, and a **$316 million NPV reduction in other value added** components of the economy.

Summary of Recommendations

- FACW project should be rejected because it is not in the public interest and does not meet the statutory requirements of the OSWEDA (N.J.S.A. 48:3-49 et seq.) since the project, and its proposed OREC prices, **do not result in a net economic benefit** to New Jersey ratepayers. The proposed project will create a **negative net economic impact of almost $1.0 billion in NPV terms**.
- The FACW project should also be rejected as it fails to meet the nameplate capacity limitation outlined by N.J.S.A. 48:3-87.2.
- The FACW project also leaves open a number of unanswered questions raising further important project uncertainties including:
  - Major financial partner has seen a sudden and unexplained decrease in share prices.
  - Turbine vendor has no experience in the selected turbine technology (direct drive).
  - FACW has not shown that the uncertain direct drive technology is cost effective relative to the more familiar gearbox turbine technology.
  - The per unit development costs are exceptionally out of line with the market for unexplained reasons.

1. Summary of Proposal

Project at a Glance

- In February, 2011, Fishermen's Atlantic City Windfarm, LLC ("FACW" or "the project") submitted a Verified Petition to the New Jersey Board of Public Utilities requesting permission to build a state waters offshore windfarm project.[1]
- FACW originally proposed to use six (6) 4 MW offshore wind turbine generators for a total project capacity of 24 MW.[2] The vendor was unknown at the time of the original application.[3]
- Currently, FACW is proposing to use six (6) 5 MW turbines supplied by Xiangtan Electric Manufacturing Group, Ltd ("XEMC").[4] While the total nameplate capacity of the project could be listed as 30 MW, the project developers note that FACW will operate at a nominal 24 MW capacity rating.
- FACW is proposed to be built 2.8 miles offshore,[5] and if built, the project will be the first offshore wind farm in the United States.[6]
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Source:
[1] Verified Petition, February 9, 2011, p. 1-2; [2] Verified Petition, February 9, 2011, p. 2; [3] *Ibid.;* [4] Petition Supplement No. 3a, Designation of XEMC as turbine supplier, July 12, 2011, p. 3; [5] Verified Petition, February 9, 2011, p. 2.; [6] *Fishermen's Energy Technology Choice and Industrialization* presentation to the BPU Staff and Rate Counsel on June 8, 2011, p. 3; and [7] Response to Discovery Request RCR-PF-3, Attachment "Electronic Project Model.xls".

Offshore Project Location

The project is proposed to be developed in New Jersey state waters, within 2.8 miles of the coast. The project will be visible to the beaches of Atlantic City. In fact, increased tourism, associated with viewing the developed project, has been claimed by the developers as a major economic benefit of the project.

Source:
Verified Petition, February 9, 2011, Appendix 1, Attachment 1a.

Total Project Cost and Capital Expenditure Profile

The FACW project is currently anticipated to cost

The installed costs for the project are anticipated to run at per installed kW of capacity.

The project levelized cost, which serves as the basis for its requested financial support, is per MWh generated.

Over percent of the project's development expenditures are associated with capital investments in the turbine and equipment.

Labor costs are anticipated to comprise over percent of the project's overall costs with the balance being allocated to other miscellaneous development costs.

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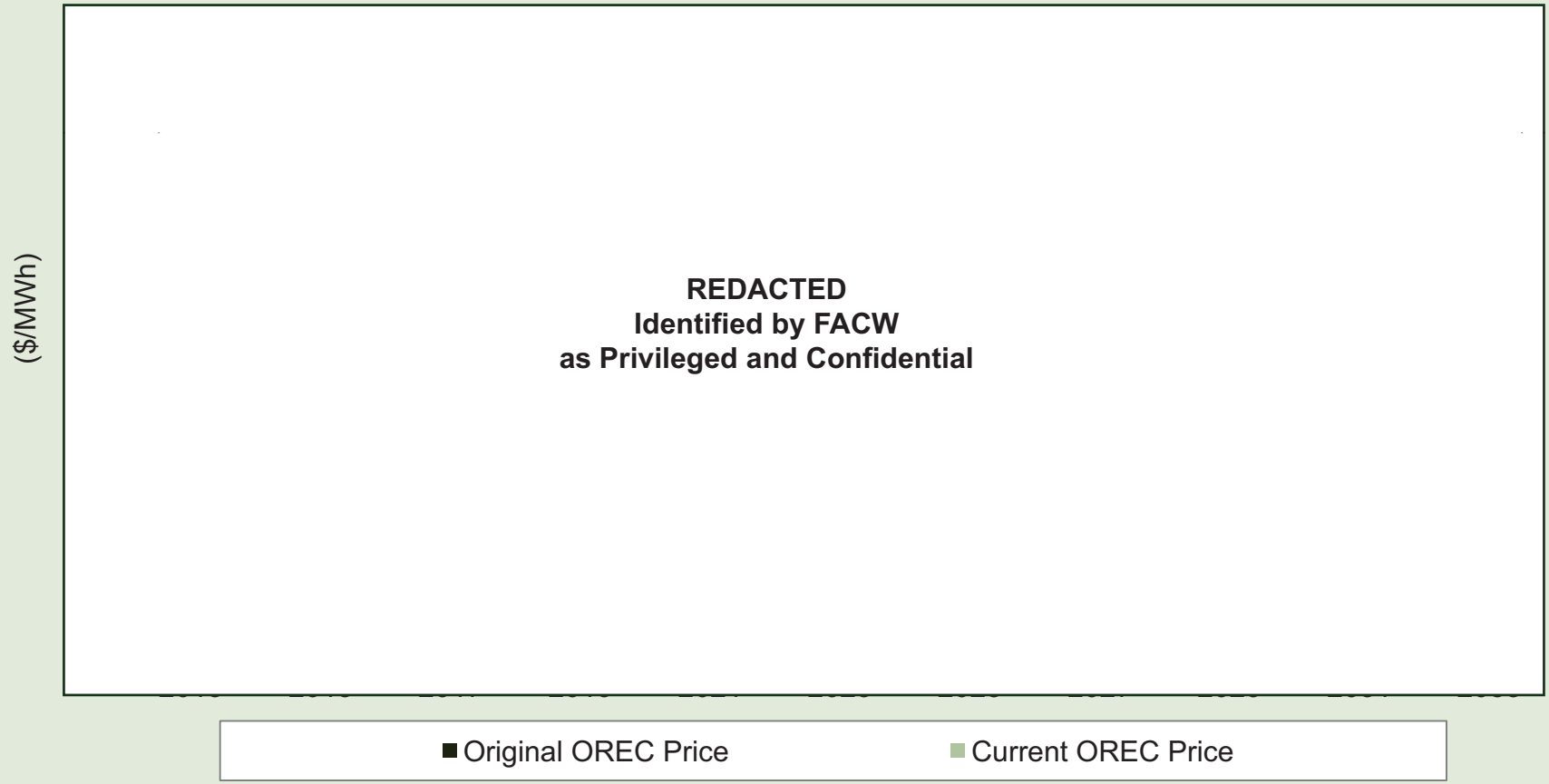
Note: [1] Assumes a 35 percent capacity factor; Table is estimated based on the cost categories provided in Table 11.x.1 of the Petition Supplement No. 1 and the total capital cost of million as provided in the proforma in response to RCR-PF-3.
Source: Petition Supplement No. 1, June 8, 2011. Table 11.x.1; and Response to RCR-PF-3.

OREC Proposal, Price

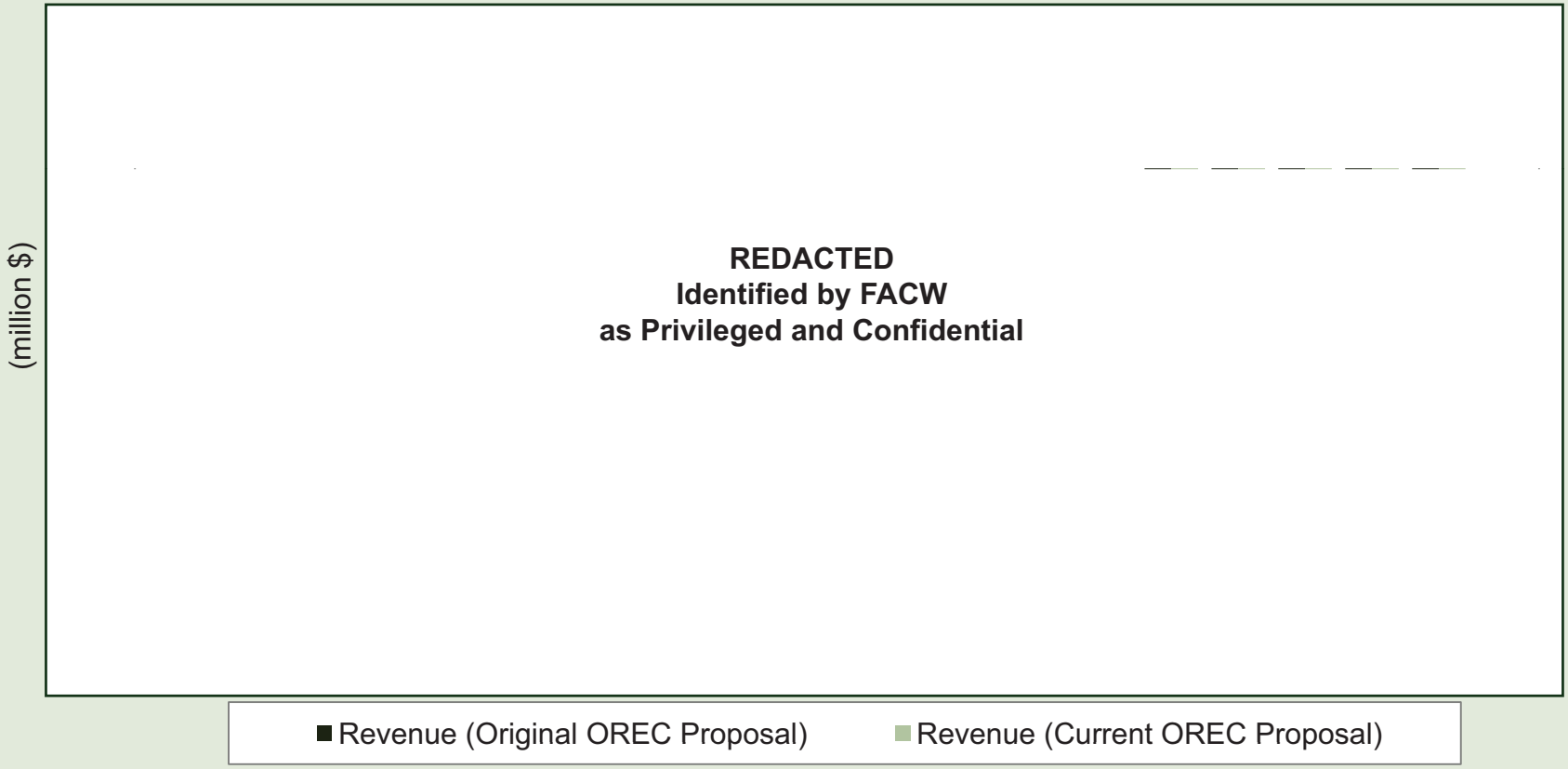
FACW has increased its requested unit value financial support from per OREC to per OREC. FACW is requesting a percent annual escalation factor to the initial OREC price. Over time, the ORECs collected on the proposed FACW will be as high as per OREC (or per MWh generated at the project).



Source:
Verified Petition, February 9, 2011, Exhibit A, Table 5.3; and Verified Petition, May 19, 2011, Exhibit A, Table 6.3.

OREC Proposal, Proposed Project Revenues

FACW's proposed OREC pricing will generate between $ million to over $ million in annual project revenues over the next twenty years. Total revenues collected under the current proposal will amount to over $ million, or $ million on an NPV basis.[1]



Note: [1] The Net Present Value ("NPV") calculation discounts a future stream of dollars to compare the value of a today to the value of that same dollar in the future. The discount rate used in this report is six percent.
Source: Verified Petition, February 9, 2011, Exhibit A, Table 5.3; and Verified Petition, May 19, 2011, Exhibit A, Table 6.3.

Developers' Reported Economic Benefits

FACW estimates a one-time, $ million in economic benefits that will be created by project construction. FACW estimates that the project will create over 1,100 construction-related jobs.

Annual economic benefits associated with operating the FACW facility are estimated at $ million. FACW states that the project is expected to directly employ 15 workers, and create another 26 indirect and induced jobs.

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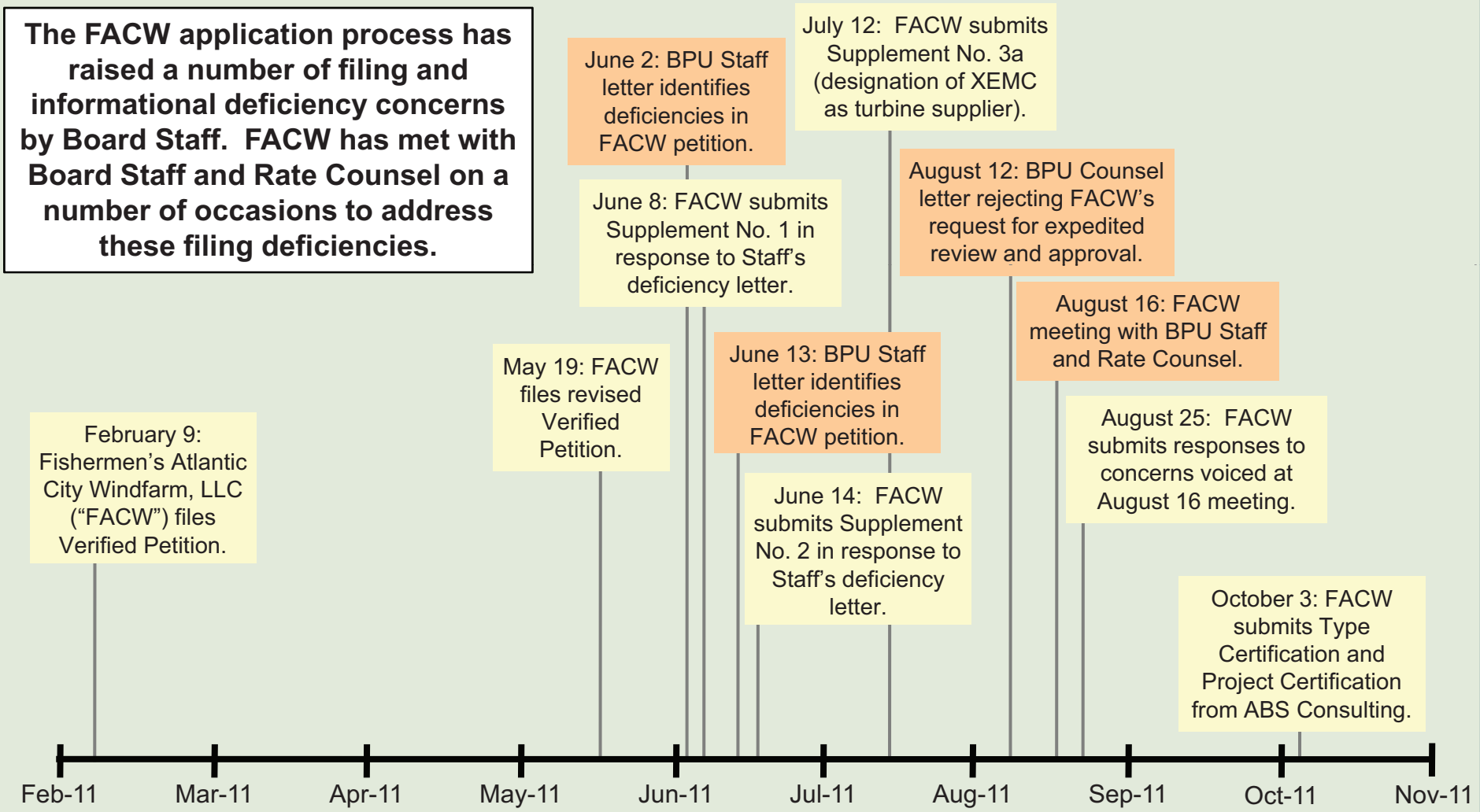
Source:
Petition Supplement No. 1, June 8, 2011. Table 11.x.iii.1.

Timeline of FACW Application Process

The FACW application process has raised a number of filing and informational deficiency concerns by Board Staff. FACW has met with Board Staff and Rate Counsel on a number of occasions to address these filing deficiencies.



Timeline of FACW Delivery Schedule

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Source: Provided by FACW in response to an August 16, 2011 meeting with BPU Staff and Rate Counsel.

Changes in the FACW Application and Request

FACW has modified its application a number of times. These supplemental application filings include changes in individual turbine capacities, requested OREC prices, project revenues, and project returns.

	Verified Petition 9-Feb-11	Verified Petition 19-May-11	Current Request
Project Capacity[1]			
Number of Turbines	Six	Six	Six
Turbine Capacity	4 MW	n.a.	5 MW
Total Capacity	not to exceed 25 MW	not to exceed 25 MW	30 MW
Annual Projected Generation	76,668 MWh	74,440 MWh	74,440 MWh
Total Generation (2013-2033)	1,533,360 MWh	1,487,580 MWh	1,487,580 MWh
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Note: [1]In its original verified petition, dated February 9, 2011, FACW stated that the project was "envisioned to consist of six (6) 4 MW General Electric ("GE") offshore wind turbine generators." In its revised verified petition, dated May 19, 2011, FACW stated that the project would consist of six (6) offshore wind turbine generators, but noted that the specific manufacturer and model for the offshore wind turbines to be utilized had not yet been finally selected. In Petition Supplement No. 3a, dated July 12, 2011, FACW designated XEMC as the turbine supplier, with "six nominal 5 MW XEMC/Darwind XD115 direct-drive wind turbines."

Source: Verified Petition, February 9, 2011; and Verified Petition, May 19, 2011; Petition Supplement No. 1, June 8, 2011; and Petition Supplement No. 3a, July 12, 2011.

2. Project Developers and Equipment Vendors

a. Technology Selection
b. Vendor Selection
c. Turbine Size Selection

2. Project Developers and Equipment Vendors

a. Technology Selection

Overview: FACW has considered both gearbox and direct drive technologies. Each have their corresponding costs and benefits. FACW, however, has not provided adequate information on the costs and benefits of its selected technology, and has made no corresponding change to its proposed OREC or economic benefits as a consequence of selecting a technology that was uncertain at the time of its initial application.

Project Capacity and Technology

- In the original application, FACW indicated that it was examining two different types of wind turbines; gearbox turbines and direct drive turbines. FACW ultimately decided, after its initial filing, to choose the direct drive technology under development by Xiangtan Electric Manufacturing Company ("XEMC").[1]
- Gearbox based wind turbines are the less expensive of the two, but are thought to have higher maintenance costs. Direct drive turbines are newer technology, but are generally considered to be more expensive and are expected to have lower maintenance costs.[2]
- Direct drive turbines are reported to have 15 to 20 percent higher capital costs than gearboxes.[2] Not only are they more expensive, but they also create about four percent less in electricity output on average.[3]

Source:
[1] Petition Supplement No. 3a, July 12, 2011, p.3.
[2]"Technical Data about Xemc Windpower XE/DD115 Wind Turbine." *The Wind Power*. Jan. 2011. Web. 07 July 2011. <http://www.thewindpower.net/wind-turbine-datasheet-technical-732-xemc-windpower-xe-dd115.php?PHPSESSID=bcf64dfde5126cd73beb15e586914b41>.
[3] Patel, Prachi. "GE Grabs Gearless Wind Turbines." *Technology Review*. MIT, 23 Sept. 2009. Web. 07 July 2011. <http://www.technologyreview.com/energy/23517/>.

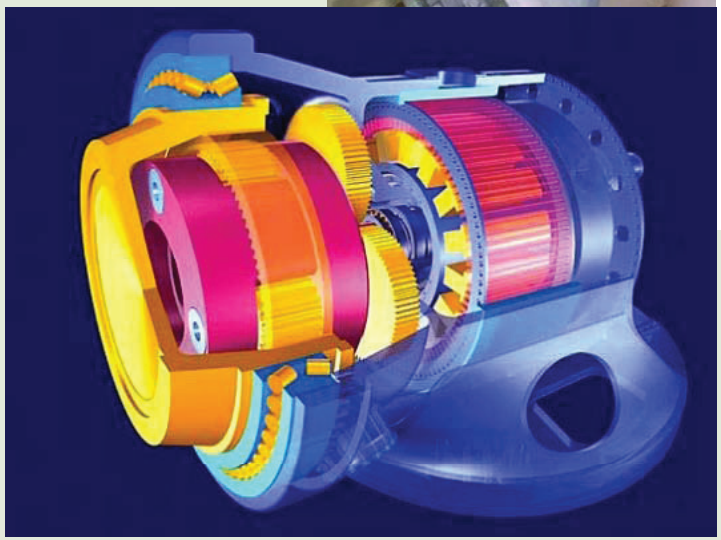
Project Capacity and Technology

- Maintenance cost differences are reportedly attributed to a large number of moving pieces in gearboxes that are not found in direct drives. Individual component failures can lead to failures in the entire gearbox, resulting in a complete turbine shutdown.
- A larger number of moving parts can lead to higher maintenance costs, especially in off-shore areas where wind gusts and speeds are substantially higher than on-shore turbines. These cost differentials can be important in hard to access, and more difficult offshore marine environments.
- GE is currently developing a hybrid solution called the "IntegraDrive"[1] that is projected to be less expensive than a direct drive but has lower maintenance costs than the gearbox-based turbines. While FACW has considered GE technologies for its proposed project, it does not appear to have discussed the potential for alternatives like the IntegraDrive design."

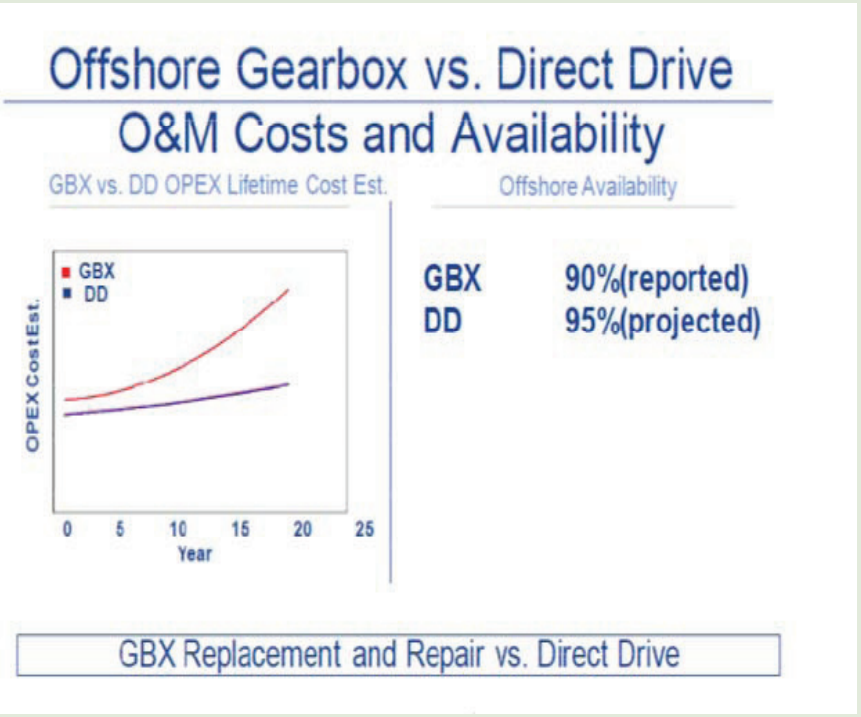
Source:
[1] Larsen, Kari. "Making Wind More Efficient?" *Renewable Energy Focus*. 1 Dec. 2008. Web. 07 July 2011. <http://www.renewableenergyfocus.com/view/3271/making-wind-more-efficient-/>.

Gearbox vs. Direct Drive

Gearbox Design



Direct Drive Design



Source: Ragheb , A. and M. Ragheb. 2010. Wind Turbine Gearbox Technologies. *Proceedings of the 1st Nuclear and Renewable Energy Conference (INREC10),* Amman, Jordan, March 21-24, 2010; and Response to discovery question RCR-VE-11.

Recommendations: Filing and Informational Deficiencies (Direct Drive Selection)

- FACW has made no apparent change to its cost and OREC proposal after the selection of the XEMC direct drive technology despite the fact that these technologies are reported to have (1) higher capital costs, (2) lower O&M costs and (3) potentially lower efficiencies (lower output).
- FACW's supplemental application did not show, in total dollars, or dollars per installed capacity, the likely differing capital costs from the initial application that considered, and appears to initially have focused on the more proven gearbox technologies. [1]
- FACW's supplemental application, and following discovery responses, did not provide any direct evidence of any improved O&M efficiencies. When queried on this matter, FACW simply provided a table on the mean time before failure for the Siemens technology.[2]

Source:
[1] Verified Petition, February 9, 2011, p. 16-17; Verified Petition, February 9, 2011, Exhibit A, p. 2 and 4; and *Fishermen's Energy Technology Choice and Industrialization* presentation to the BPU Staff and Rate Counsel on June 8, 2011, p. 5 and 9.
[2] Response to discovery question RCR-VE-10, Attachment "RCR VE 10 Failure Rate of Major Turbine Components.pdf"

Recommendations: Filing and Informational Deficiencies (Direct Drive Selection), cont.

- FACW further indicated that: "*to the best of our knowledge, there currently are no direct drive turbines from any manufacturer installed offshore in the world . . . Without actual operating proof, projections of O&M savings are conjectural.*"[1]
- The fact that FACW questions the existence of any O&M savings raises questions about the need for using a relatively new and untested technology.
- FACW did not adjust its anticipated annual output to correct for potential efficiency losses that have been noted with the direct drive technologies. As an alternative, FACW did not address why it believes such inefficiencies were not likely to arise.
- Changes in capital costs, O&M, and output are likely to have implications for any requested OREC. Yet, FACW has not provided any information updating or modifying its OREC pricing schedule.

Source:
[1] Response to discovery question RCR-VE-11.

Recommendations: Filing and Informational Deficiencies (Direct Drive Selection), cont.

- It is not uncommon, in the regulatory review of a proposed generation technology, to assess the net present value revenue requirement of each technology, taking into account capital, O&M, and fuel costs, among other considerations.
- For instance, in assessing the relative merits of a natural gas fired generator, as opposed to a coal unit, a utility is likely to examine the NPV costs of both technologies taking into account a wide range of objective, and often subjective, factors as well as a wide range of sensitivities impacting those outcomes.
- FACW has simply provided no comparable analysis of the direct drive technologies to the gearbox technologies. Rate Counsel's repeated discovery requests asking for this information has simply been either non-responsive, or dismissed as unimportant by FACW.[1]

Source:
[1] Response to discovery questions RCR-VE-8; RCR-VE-11; RCR-VE-12; and RCR-VE-13.

2. Project Developers and Equipment Vendors

b. Vendor Selection

Overview: FACW has selected a 5 MW direct drive technology manufactured by XEMC.

XEMC is relatively new to both offshore wind development and the manufacturing of direct drive offshore wind turbines. While the use of new innovative company may have some merit, certain costs and benefits should be included in this analysis – FACW has not shown any monetary benefits for the risk of accepting a new, and inexperienced supplier.

XEMC Selection Process and Rationale

- FACW originally considered a variety of technologies from various well-established companies that include Siemens and General Electric.[1]
- Ultimately, FACW selected XEMC as the vendor for its project since it was the only provider with direct drive technology that would be available in the time frame needed for this project.[2]
- According to *Wind Power*, XEMC currently makes two 5 MW wind turbines, the XE/DD115 (that is being used for the Fuqing Haitan Strait wind farm) and XE/DD126.[3]
- Fisherman's Energy will use the same XE/DD115 for FACW.
- Both the XE/DD115 and XE/DD126 are direct drive turbines.

Source:

[1] Verified Petition, February 9, 2011, p. 16-18; Verified Petition, February 9, 2011, Exhibit A, p. 2-4; and *Fishermen's Energy Technology Choice and Industrialization* presentation to the BPU Staff and Rate Counsel on June 8, 2011, p. 4-6.

[2] *Fishermen's Energy Technology Choice and Industrialization* presentation to the BPU Staff and Rate Counsel on June 8, 2011, p. 5 and 7.

[3] "Technical Data about Xemc Windpower XE/DD115 Wind Turbine." *The Wind Power*. Jan. 2011. Web. 07 July 2011. <http://www.thewindpower.net/wind-turbine-datasheet-technical-732-xemc-windpower-xe-dd115.php?PHPSESSID=bcf64dfde5126cd73beb15e586914b41>.

XEMC XE/DD115 Specs

XE/DD115 Specifications

- General data
  - Nominal Power: 5000 kW
  - Rotor diameter: 115 m
  - Wind class: IEC Ic
  - Surface: 10386.9 m^2
  - Power density: 2.07738 m^2/kW
  - Wings number: 3
  - Power Control: Pitch
- Weight
  - Rotor: tons
- Rotor
  - Max rotation speed: 23 rounds/minute
  - Min wind speed: 4 m/s
  - Nominal wind speed: 12 m/s
  - Max wind speed: 25 m/s
- Tower
  - Hub height: 100m

Source:
XEMC website: http://www.xemc-wind.cn/.

XEMC: Overview

- XEMC is a Chinese company founded in 1936.
- It has been involved with manufacturing of equipment in China, having produced more than 1,000 products over its lifetime.[1]
- XEMC was listed publicly in July 2002 and is traded on the Shanghai Stock Exchange (SHA:600416). [2]
- Today, XEMC manufactures numerable products such as electric machinery, pumps, heavy equipment, wind generators, electric lifts, and ceramic machines. [3]
- XEMC's primary offshore turbine is based on technology formerly-owned by Darwind, a company whose former majority shareholder was Econcern. XEMC has a separate division that develops offshore wind projects called XEMC-Wind.

Source:

[1] "Corporate Introduction." *XEMC*. XEMC. Web. 07 July 2011. <http://www.xemc.com.cn/en/about/about.html>.

[2] "Xiangtan Electric Manufacturing Co.,Ltd." *Google Finance*. Web. 14 July 2011. <http://www.google.com/finance?q=SHA:600416>.

[3] "Electric machine." *XEMC*. XEMC. Web. 07 July 2011. <http://www.xemc.com.cn/en/product/productList.asp>.

Project Finance: Source of Financing

a subsidiary of XEMC New Energy, will take a in the FACW project. XEMC New Energy is owned primarily by XEMC Group, a company that is primarily owned by a provincial government entity that is part of the Peoples' Republic of China. If FACW is approved, percent of the profits of the FACW project is likely to leave both the U.S. and New Jersey.

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Source: Provided by FACW in response to an August 16, 2011 meeting with BPU Staff and Rate Counsel.

The Evolution of XEMC's OSW Business Development: Econcern (Darwind Predecessor)

- Econcern was founded in 1984 and was based in Utrecht, Netherlands.
- Econcern was an international holding company with five operating companies all engaged in sustainable energy projects.
- It had operations all over the world; Belgium, Brazil, Bulgaria, Canada, the Czech Republic, Curaçao, Chile, China, France, the Gambia, Germany, Hong Kong, Italy, the Netherlands, Poland, Spain, Switzerland, Turkey, the United Kingdom, and the United States.
- Econcern declared bankruptcy on June 15, 2009.[1, 2]
- Prior to this bankruptcy Econcern was the majority shareholder in Darwind, the original developer of the 5MW direct drive turbine proposed by FACW.

Source:

[1] "Econcern NV: Private Company Information." *Bloomberg Businessweek*. Web. 13 July 2011. <http://investing.businessweek.com/research/stocks/private/snapshot.asp?privcapId=10620654>.

[2] "Dutch Energy Firm Econcern Files for Receivership." *Reuters*. 26 May 2009. Web. 13 July 2011. <http://www.reuters.com/article/2009/05/26/dutch-econcern-idUSLQ23289420090526?sp=true>.

The Evolution of XEMC's OSW Business Development – Darwind Acquisition

- Darwind was founded in 2006 and was based in Utrecht, the Netherlands.
- Econcern was the majority shareholder in Darwind.
- From 2006 to 2009, Darwind developed a 5-MW direct-drive turbine now being proposed by FACW.
- The 2009 Econcern bankruptcy also placed Darwind in financial trouble.
- The Econcern bankruptcy led to XEMC's acquisition of Darwind's hardware and intellectual property,[1] starting a new company that is today known as XEMC-Darwind.[2]

Source:
[1] Vries, Eize De. "Optimism in Offshore Wind." *Renewable Energy World*. 9 Dec. 2009
[2] "Welcome to XEMC-Darwind." *XEMC Darwind*. Web. 14 July 2011. <http://www.xemc-darwind.com/>.

XEMC: Ongoing Projects

- Currently XEMC-Darwind only reports one active offshore project.
- XEMC is providing the XE/DD115 5MW turbine to Huadian Power for their 200MW Fuqing Haitan Strait wind farm located in the central Haitan Strait in China.[1]
- Huadian Power is purchasing forty of the XE/DD115 turbines from XEMC-Darwind for this project. [1]
- Once completed, this project is expected to produce 500 GWh annually which is equivalent to 2,500 hours of full load/year.

Source:
[1] "Wind Farm of Fuqing Haitan Strait - General Data." *The Wind Power*. May 2011. Web. 07 July 2011. <http://www.thewindpower.net/wind-farm-16151.php>.

Current XEMC Offshore Project Development

XEMC Project: Fuqing Haitan Strait, China

XEMC's U.S. Relationships: Twin Brothers' Marine

- According to *Recharge*, XEMC announced, in May 2010, that it was planning to either purchase or become an equity shareholder in a steel rolling mill owned by Twin Brothers Marine in Louisiana to support a 75-turbine wind farm near Galveston Island. [1]
- There have been no other media reports regarding the status of this potential relationship.
- On July 15 2011, ACG contacted David Webster with Twin Brothers Marine Company. Mr. Webster did confirm Twin Brothers' discussions with XEMC last year, but no serious negotiations or actions ever materialized. Mr. Webster indicated that Twin Brothers had not heard from XEMC in about a year now and that there are currently no plans for a business deal with XEMC.

Source:

[1] Kessler, Richard A. "China's XEMC Reveals Plans for Louisiana Factory - Wind - Renewable Energy News - Recharge - Wind, Solar, Biomass, Wave/tidal/hydro and Geothermal." *Recharge*. 14 May 2010. Web. 07 July 2011. <http://www.rechargenews.com/energy/wind/article214822.ece>.

[2] "Wind Farm of Fuqing Haitan Strait - General Data." *The Wind Power*. May 2011. Web. 07 July 2011. <http://www.thewindpower.net/wind-farm-16151.php>.

XEMC's U.S. Relationships: Timken

- Timken, a U.S. company in Canton, OH, entered into a joint venture with XEMC in 2010.[1]
- The construction of Timken's China facility started in January 2009. Timken is providing ultra large bore bearings to XEMC that are used in the production of wind turbines.
- Timken has built a $39 million USD plant in Xiangtan City to make these bearings.[2]

Source:

[1] "Timken-XEMC Joint Venture in China Shipping Ultra-Large Bore Bearings from Its Xiangtan, Hunan Facility." *Mfrtech*. 1 July 2010. Web. 07 July 2011. <http://www.mfrtech.com/articles/3591.html>.

[2] "Timken Xiangdian (Hunan) Bearing Co., Ltd." *XEMC*. Web. 07 July 2011. <http://www.xemc.com.cn/en/cooperation/coop_enter_timken.html>.

XEMC's U.S. Relationships: Light Engineering

- Light Engineering (LE), another U.S. company, and XEMC have also recently set up a joint venture. [1,2]
- They created a new company that is called XELE and will be located in Xiangtan, China. According to LE, this is a long-term strategic manufacturing partnership.
- XELE currently has an 80,000 square foot manufacturing facility located in XEMC's Xiangtan campus in China.[3]
- According to XEMC's website, XEMC also has a cooperation agreement with General Electric Company in the United States on 220 tons of electric wheel drive systems.[4]

Source:

[1] Johnston, Mathew. "LE and China Technology Leader Xiangtan Electric Manufacturing Corporation Form Partnership." *RedOrbit*. 11 Jan. 2011. Web. 7 July 2011. <http://www.redorbit.com/news/business/1977768/le_and_china_technology_leader_xiangtan_electric_manufacturing_corporation_form/>.

[2] "LE and China Technology Leader Xiangtan Electric Manufacturing Corporation Form Partnership." *IStockAnalyst*. 11 Jan. 2011. Web. 20 July 2011. <http://www.istockanalyst.com/article/viewiStockNews/articleid/4803333>.

[3] "Maufacturing." *LE: Powering Your Innovation*. Light Engineering, 2009. Web. 18 July 2011. <http://www.lt-eng.com/innovation/innovation-manufacturing.html>.

[4] "Successful Projects." *XEMC*. 2008. Web. 20 July 2011. <http://www.xemc.com.cn/en/cooperation/coop_ralation.html>.

XEMC's U.S. Relationships: Current OSW Supply Chains

According to Discovery Response RCR-PF-13:

- *"XEMC Windpower . . . does not currently have supply chain relationships in the United States."*
- *"XEMC intends to develop United States capabilities for operations and maintenance (O&M) of the State Waters Project. This United States O&M staff will expand to service the federal waters follow on projects that will be built with XEMC turbines from the planned XEMC manufacturing facilities to be located in the Port of Paulsboro."*

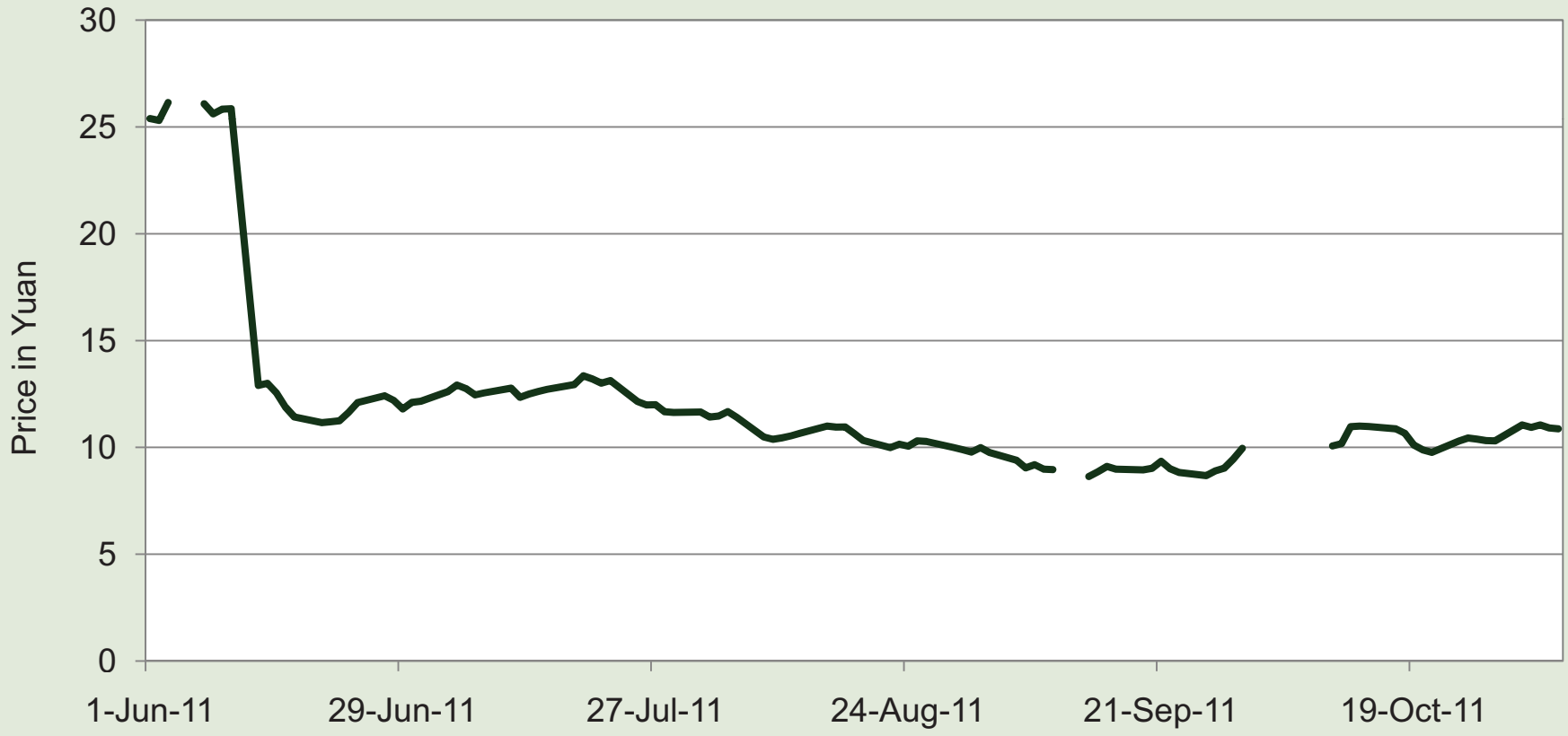
XEMC Share Prices

XEMC's share prices have seen substantial growth from early 2009 to about early spring, 2011. The Company's share prices fell dramatically in June, 2011 and have not rebounded to their prior levels.

Source:
Google Finance.

XEMC Share Prices (2011 to current)

In after-hour trading of June 10-13, 2011, the XEMC stock price went from 25.85 Yuan to 12.90 Yuan. This is almost a 50 percent loss in value over the weekend. XEMC has paid a dividend by the end of June each year for the last eight years, but did not do so in 2011.



Source:
Google Finance.

Public Reports on XEMC Share Price Decreases

- On November 8, 2008, XEMC announced that due to shortage of cash, it would give up the priority purchase right to buy the 27 percent interest of XEMC Windpower Co., Ltd, which was sold out by the Japanese Philip Nissan. This news was reported to have surprised many investors.
- XEMC had a non-public offering on June 2, 2011.
- Reporting services noted that an important investor, Dongfest (East Wind) Assets, did not inject capital into XEMC as expected.
- Reporting services noted that during May and June 2011, four out of five institution investors dumped their stock holdings after finding that the major stockholder is intensifying its efforts to empty XEMC.

FACW Explanation for XEMC Share Price Decrease

- FACW notes that:

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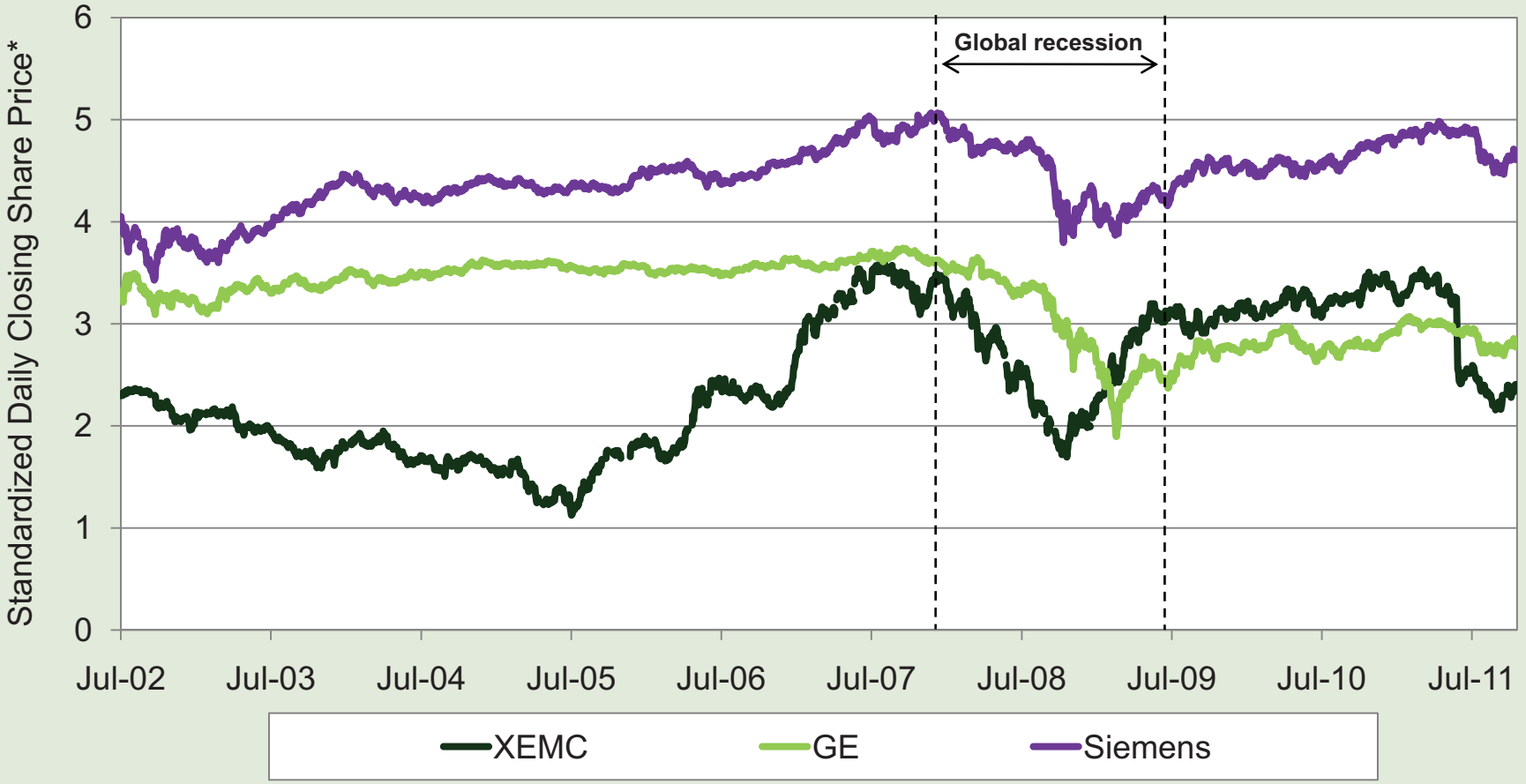
- Further research suggests that XEMC did issue new shares. (Appendix 1)
- It is not clear however, if the issuance of new shares was the only factor leading to the decreased share price since there is mixed financial news reported during this period.
- XEMC also had a stock split on December 8, 2005. There was however, no significant decline in share price subsequent to this split.[2]
- Appendix 1 provides additional news articles on XEMC's recent share price performance.

Source:
[1] Additional Supplemental Update. Impact of XEMC's Participation to the FACW Filing, August 1, 2011.
[2] Google Finance

Comparative Closing Share Prices (Standardized)

Standardized closing share prices from 2002 until the present show that XEMC's share prices are clearly more volatile than both GE and Siemens.



Note: Standardized using a natural logarithm.
Source: Google Finance.

XEMC Financial Statistics

XEMC is trading currently at about $2.40 USD per share. Its price-to-earnings ("P/E") is higher than GE and Siemens, while its return on assets ("ROA") ratio is considerably lower than both GE and Siemens.

Company	Current Trade Price	Price-to-Earnings Ratio	Return on Assets
XEMC (SHA:600416)	11.02 CYN	35.53	0.14%
GE (NYSE:GE)	16.15 USD	13.27	1.77%
Siemens AG (NYSE:SI)	100.27 USD	12.23	3.01%

Source:
Google Finance.

Recommendations: Vendor Uncertainties and Risks

- The selection of XEMC as the turbine vendor, as well as a major financial backer of the project raises a number of important questions and concerns.
- XEMC's affiliate will take an exceptionally large ownership position in the FACW project. If this project is approved, a large share of the project's profits will likely leave New Jersey and the U.S.
- XEMC has clearly attempted to build prior U.S. relationships and enter U.S. markets. The FACW project, however, will likely be XEMC's largest U.S. relationship.
- XEMC has no existing supply-chain relationships for the development of an OSW project.

Recommendations: Vendor Uncertainties and Risks

- XEMC's share prices have historically been volatile over the past several years. The company's share prices fell dramatically in June, 2011 and, to date, have not rebounded to their prior levels.
- There is considerably uncertainty in the trade press regarding the causes of XEMC's share price decrease.
- XEMC has no working direct drive system in place although it is attempting to develop projects in China.
- XEMC is not a highly-tested company in either onshore nor offshore wind development. XEMC does not appear to be giving FACW any discount, price break, or other concession to compensate for its lack of experience and familiarity in U.S. or European wind energy markets.

2. Project Developers and Equipment Vendors

c. Turbine Size Selection

Overview: FACW has selected to use six direct drive turbines with a nameplate capacity of five MW each. The effective total nameplate capacity of the project will be 30 MW, an amount in excess of the State Waters Project allowed under N.J. Stat. § 48:3-87.1 and N.J. Stat. § 48:3-87.2.

FACW has not satisfactorily explained how the current configuration of its project is consistent with the New Jersey Statutes.

Turbines Under Consideration

FACW's Turbine Technology Review

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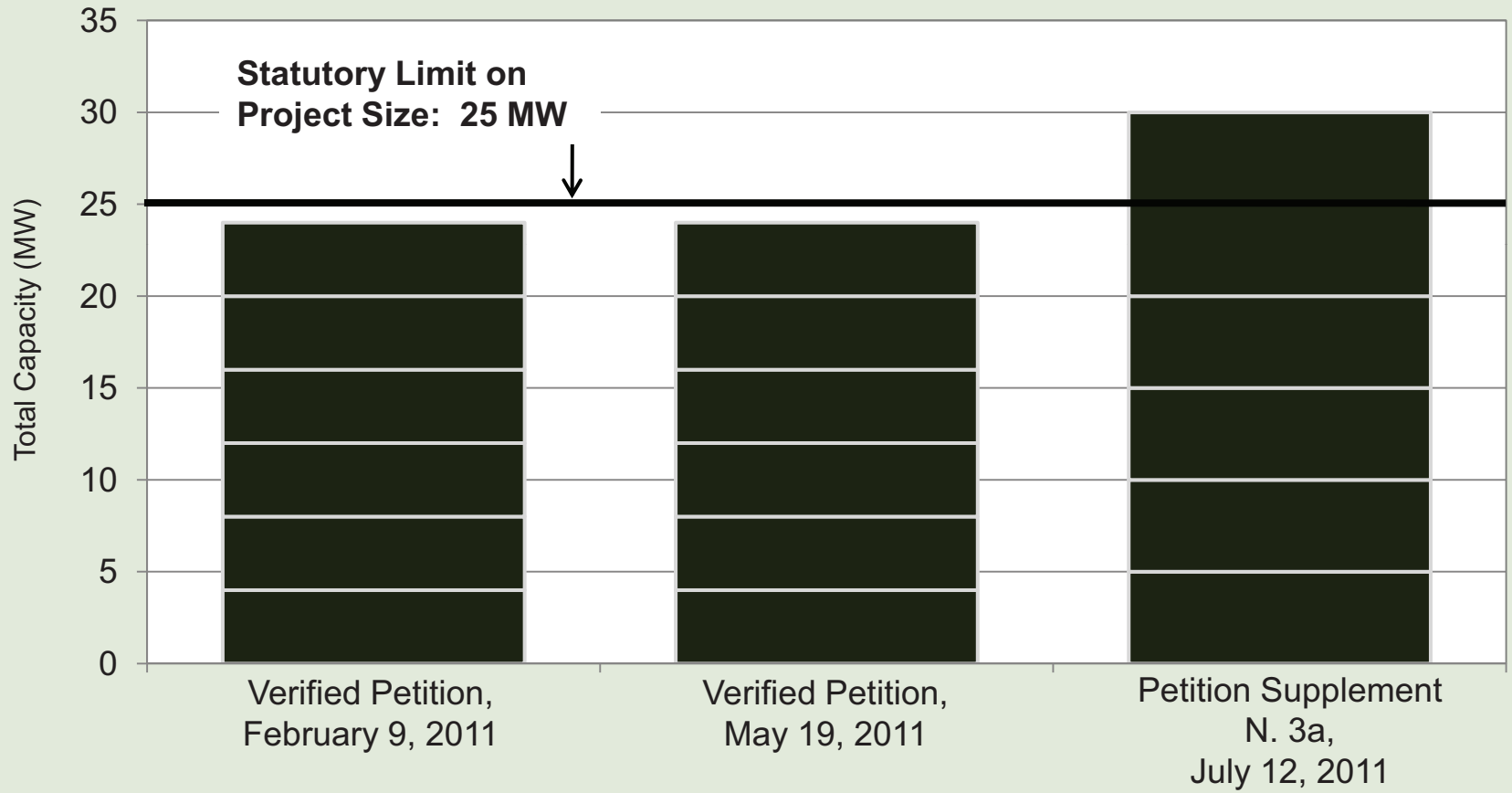
Source:
[1] *Fishermen's Energy Technology Choice and Industrialization* presentation to the BPU Staff and Rate Counsel on June 8, 2011, p. 4.

Turbines Under Consideration



Note/Source: In its original verified petition, dated February 9, 2011, FACW stated that the project was "envisioned to consist of six (6) 4 MW General Electric ("GE") offshore wind turbine generators."
In its revised verified petition, dated May 19, 2011, FACW stated that the its proposed "not to exceed 25 MW" project would consist of six (6) offshore wind turbine generators, but noted that the specific manufacturer and model for the offshore wind turbines to be utilized had not yet been finally selected.
In Petition Supplement No. 3a, dated July 12, 2011, FACW designated XEMC as the turbine supplier, with "six nominal 5 MW XEMC/Darwind XD115 direct-drive wind turbines."

OSWEDA Provisions for Project Size

§ 48:3-87.2. Approval of project by board

The board may approve, subject to the project obtaining the necessary permits, approvals, and authorizations from the Department of Environmental Protection, a qualified wind energy project located in territorial waters offshore of a municipality in which casino gaming is authorized, and authorize offshore wind renewable energy certificates for that project. **Any such project shall be a nominal 20 megawatts and no more than 25 megawatts in nameplate capacity and comply with the requirements set forth in section 3 of P.L.2010, c.57 (C.48:3-87.1)**. (emphasis added).

BPU OSW Rules

§ 14:8-6.5 Application requirements

§ 14:8-6.5 (a)

2. A detailed description of the project, including maps, surveys and other visual aides. The description shall include, but need not be limited to: the type, size and number of proposed turbines and foundations; the history, to date, of the same type, size and manufacturer of installed turbines and foundations globally; and a detailed implementation plan that highlights key milestone activities during the permitting, financing, design, equipment solicitation, manufacturing, shipping, assembly, in-field installation, testing, equipment commissioning and service start-up.

i. The project developers shall:

(1) Demonstrate applicable experience in projects of the size and scope proposed;

…….

iv. Applicants shall identify all applicable Federal and State statutes and regulations and municipal code requirements, with the names of the Federal, State and local agencies to contact for compliance, and a commitment to provide proof of all such compliance on an ongoing basis.

v. Applicants shall indicate the proposed nameplate capacity for the entire project and the anticipated number of individual units for the selected technology or for each candidate technology; and estimate the net yearly energy output for the project, accounting for losses and include any assumptions, such as the assumed capacity factor, that are the basis for the estimate.

Board Staff Concerns Regarding FACW Statutory Compliance

A BPU Staff letter to FACW dated August 12, 2011, cites concerns regarding the proposed project size:

> "The proposed project configuration includes six, 5 MW XEMC Darwind XD115 turbines, totaling 30 MW of nameplate capacity, which does not comport with the NJ Offshore Wind Economic Development Act which allows for ratepayer support of a nameplate capacity of 25 MW in State waters outside of Atlantic City. The PJM Interconnection studies and DEP permits are also specific to a 25 MW project. The Application and OREC pricing should conform to the current statute and regulations which allow for a 25 MW project."

Source:
Letter from BPU Staff. In Re: Fisherman's Atlantic City Wind Farm LLC – Request Offshore Wind Renewable Energy Certificates, Docket Number EO11050314V. August 12, 2011.

FACW Position on Turbine Size

- Discovery Response RCR-PD-6 states:

  "With the existing PJM arrangements, FACW will limit the maximum grid injection to 25 MW. The wind farm's controls will be established at this level. The theoretical capability will be up to 30 MW, but absent additional approvals from NJ DEP and PJM, the plant's net output will be managed to limit maximum injection to the grid to 25 MW."

- Discovery Response RCR-VE-15 states:

  "If the DEP and PJM allow the FACW project to produce up to 30 MW, rather than be limited to 25 MW, the six XEMC turbines are estimated, on average, to produce slightly more MWh than the six Siemens turbines."

- In FACW's "Additional Supplemental Update" dated August 1, 2011 FACW suggested

Type and Project Certification

- According to FACW's "Additional Supplemental Update" dated August 1, 2011 and as

- According to Discovery Response RCR-PD-3, this certification is not expected to be complete until August/September 2012, well after the turbines are scheduled to go into production.
- Discovery Response RCR-VE-42 states that FACW is confident that A, B and C-type Certification will be achieved based on the following:

  1) the due diligence report by Mott MacDonald on the turbine;

  2) Fishermen's due diligence and inspection;

  3) the DNV's (through XEMC-Darwin) already started involvement ; and

  4) an additional investigation/inspection by ABS Consulting (an experienced third party certifying firm).

Recommendations: Project Size and Statutory Compliance Concerns

- The FACW project does not meet the statutory requirements for the authorization of an OSW projects in state waters near a casino.
- Board staff has clearly raised this issue with FACW, which, to date, has not provided any satisfactory response regarding its failure to be in compliance with the statute
- From a policy perspective, approval of the FACW project could create legal challenges and uncertainties that could have a negative impact on ratepayers.

3. Project Development Economics

Total Project Cost and Capital Expenditure Profile

The FACW project is currently anticipated to cost

The installed costs for the project are anticipated to run at per installed kW of capacity.

The project levelized cost, which serves as the basis for its requested financial support, is per MWh generated.

Over percent of the project's development expenditures are associated with capital investments in the turbine and equipment.

Labor costs are anticipated to comprise over percent of the project's overall costs with the balance being allocated to other miscellaneous development costs.

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Note: [1] Assumes a 35 percent capacity factor; Table is estimated based on the cost categories provided in Table 11.x.1 of the Petition Supplement No. 1 and the total capital cost of million as provided in the proforma in response to RCR-PF-3.
Source: Petition Supplement No. 1, June 8, 2011. Table 11.x.1; and Response to RCR-PF-3.

Comparison of FACW to Typical OSW Development Costs, Rank Order

The FACW project, if developed, will be one of the most expensive OSW projects developed in the world on a historic basis.

The Walney Phase 1 project in the U.K. is second to FACW in cost. This project (comprised of 51 turbines) is being developed in the Irish Sea in 62 to 75 feet of water, some 9 to 16 miles from shore.[1]

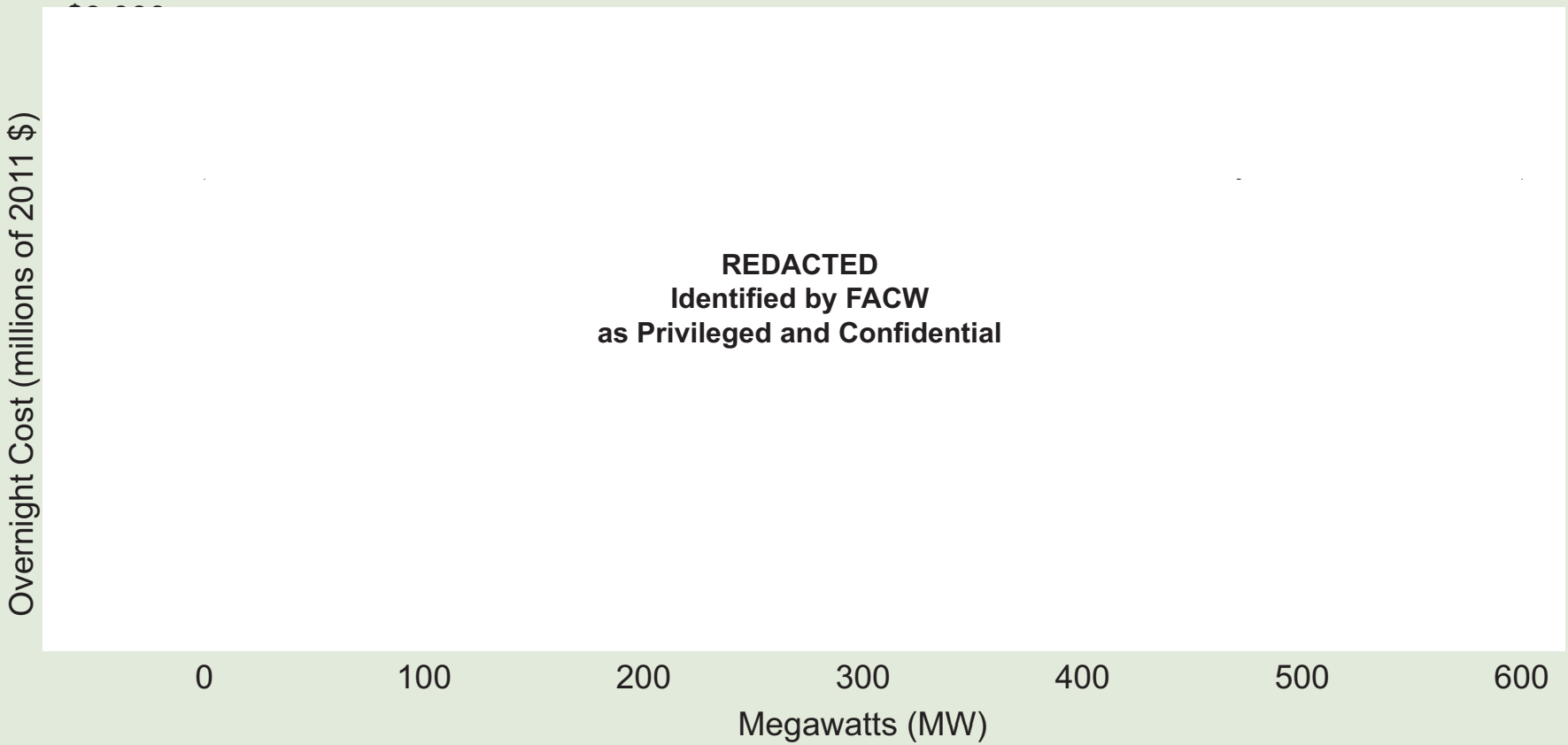
Alternatively, FACW will be developed in about 33 to 42 feet of water some 2.8 miles from shore.

Wind Farm	Location	Year Constructed	Capacity (MW)	Overnight Cost (2011 $) (million $)	($/kW)
Bockstigen	Sweden	1998	3	$ 3.8	$ 1,254.3
Middlegruden	Denmark	2001	40	$ 52.9	$ 1,323.0
Yttre Stengrund	Sweden	2001	10	$ 14.6	$ 1,464.5
Nysted	Denmark	2003	158	$ 274.4	$ 1,736.7
Samso	Denmark	2003	23	$ 41.2	$ 1,789.5
Blyth	UK	2000	4	$ 7.8	$ 1,957.2
Horns Rev	Denmark	2002	160	$ 318.7	$ 1,991.6
Utgunden	Sweden	2001	10	$ 21.7	$ 2,174.1
Kentish Flats	UK	2005	90	$ 217.6	$ 2,418.1
Irene Vorrink	Netherlands	1996	17	$ 43.4	$ 2,551.6
Egmond aan Zee	Netherlands	2006	108	$ 277.7	$ 2,571.2
North Hoyle	UK	2003	60	$ 158.3	$ 2,637.7
Lillgrund	Sweden	2007	110	$ 290.6	$ 2,641.6
Scoby Sands	UK	2004	60	$ 163.1	$ 2,718.7
Gunfleet Sands	UK	2009	173	$ 483.8	$ 2,796.3
Burbo Bank	UK	2007	90	$ 265.9	$ 2,954.2
Barow	UK	2006	90	$ 283.7	$ 3,151.8
Horns Rev 2	Denmark	2009	209	$ 681.0	$ 3,258.2
Rhyl Flats	UK	2009	90	$ 321.3	$ 3,570.1
Vindeby	Denmark	1991	5	$ 20.7	$ 4,134.2
Robin Rigg	UK	2009	180	$ 757.8	$ 4,210.0
Tuno Knob	Denmark	1995	5	$ 22.2	$ 4,431.2
Prinses Amaliawindpark	Netherlands	2008	120	$ 533.3	$ 4,444.2
Thanet	UK	2010	300	$ 1,421.1	$ 4,737.1
Greater Gabbard	UK	2010	504	$ 2,388.5	$ 4,739.2
Lely	Netherlands	1994	2	$ 10.1	$ 5,057.1
Belwind Phase 1	Belgium	2010	165	$ 840.6	$ 5,094.6
Sheringham Shoal	UK	2011	317	$ 1,791.1	$ 5,650.1
EnBW Baltic I	Germany	2010	48	$ 271.3	$ 5,652.5
Lynn/Inner Downsing	UK	2009	97	$ 574.0	$ 5,917.8
Beatrice	UK	2007	10	$ 75.1	$ 7,508.8
Walney Phase 1	UK	2011	184	$ 1,610.7	$ 8,753.8
FACW	**USA**	**2011**			

Note: [1,2] The cost of the FACW project and corresponding proposed OREC price used in this report is based upon the proforma provided in response to data request RCR-PF-3 and the rate impact analysis provided in response to data request RCR-PF-10. These files are the most recent complete financial analysis that is consistent with state statute received to date. These files are based on a [redacted] MW facility with a total cost of $[redacted] million and a starting OREC price of $[redacted] MWh. Since that time, FACW has provided additional OREC scenarios in discovery to Rate Counsel. However, those OREC proposals were not accompanied by the required proforma and cost accounting analysis as outlined by N.J.A.C. 14:8-6.5. Details on estimated costs for the sample of past developed projects has been provided in Appendix 3. Source: 4 C Offshore, http://www.4coffshore.com/; and Dong Energy, http://www.dongenergy.co.uk/.

Comparison of FACW to Typical OSW Development Costs, All Capacity Levels

The relationship of overnight cost and capacity shows that when compared to other offshore wind projects, FACW is more expensive than the average offshore wind project.



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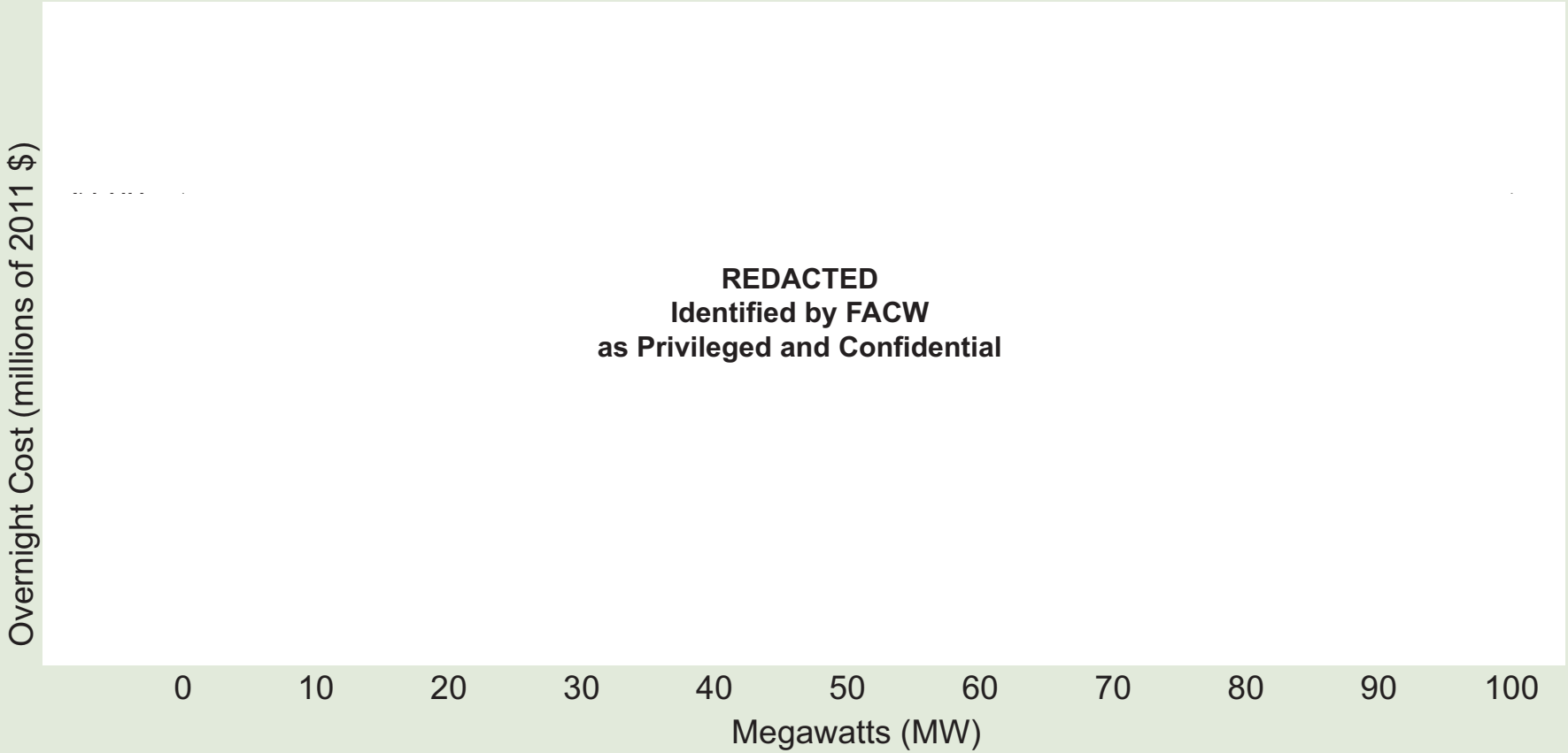
Comparison of FACW to Typical OSW Development Costs, Less than 100 MW

FACW's total project costs is still well above average total development costs when compared to only smaller offshore wind projects.



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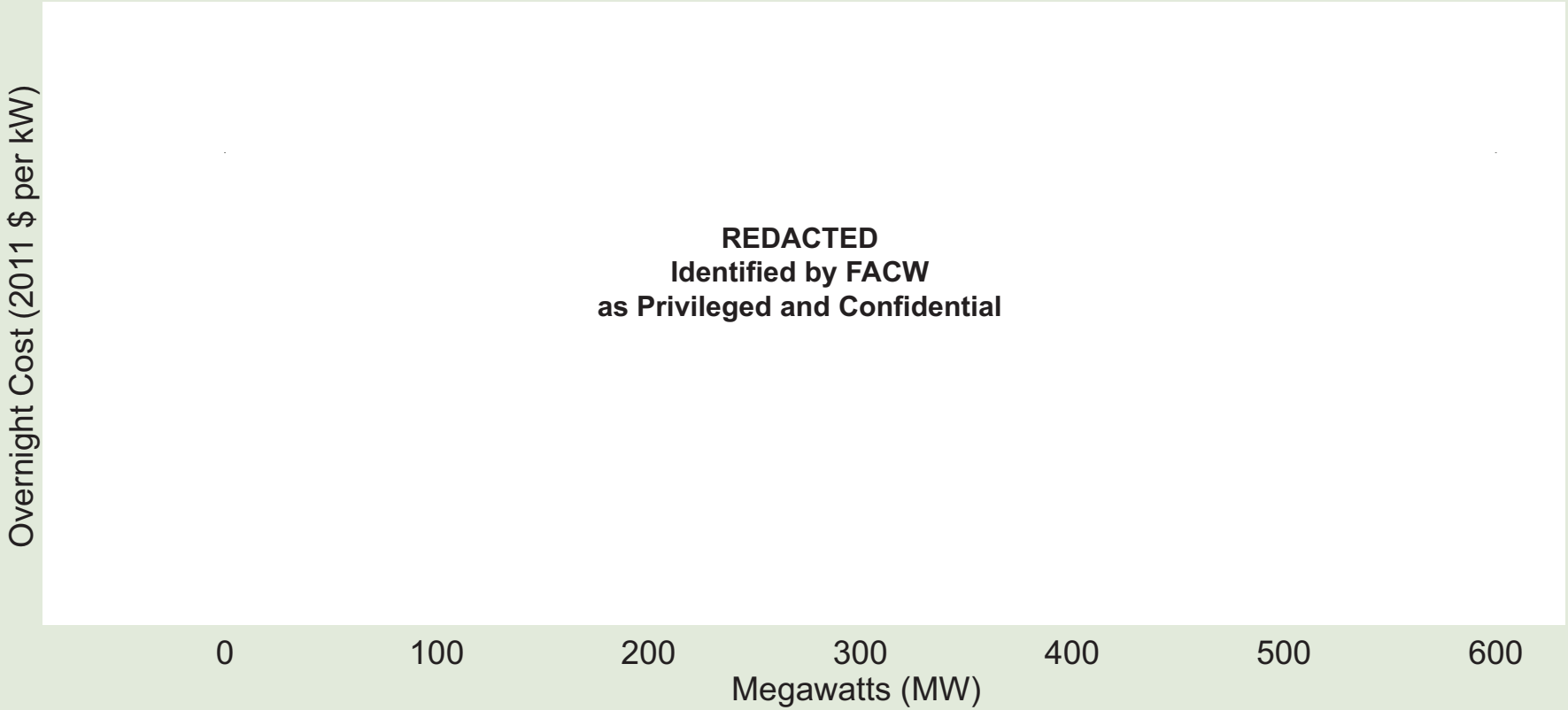
Comparison of FACW to Typical OSW Development Costs, All Capacity Levels

FACW was also compared to other projects on a unit cost, or cost per kW basis. Average costs, for a project of FACW's size, are estimated around $3,500 per kW, not the $ per kW currently projected for FACW.



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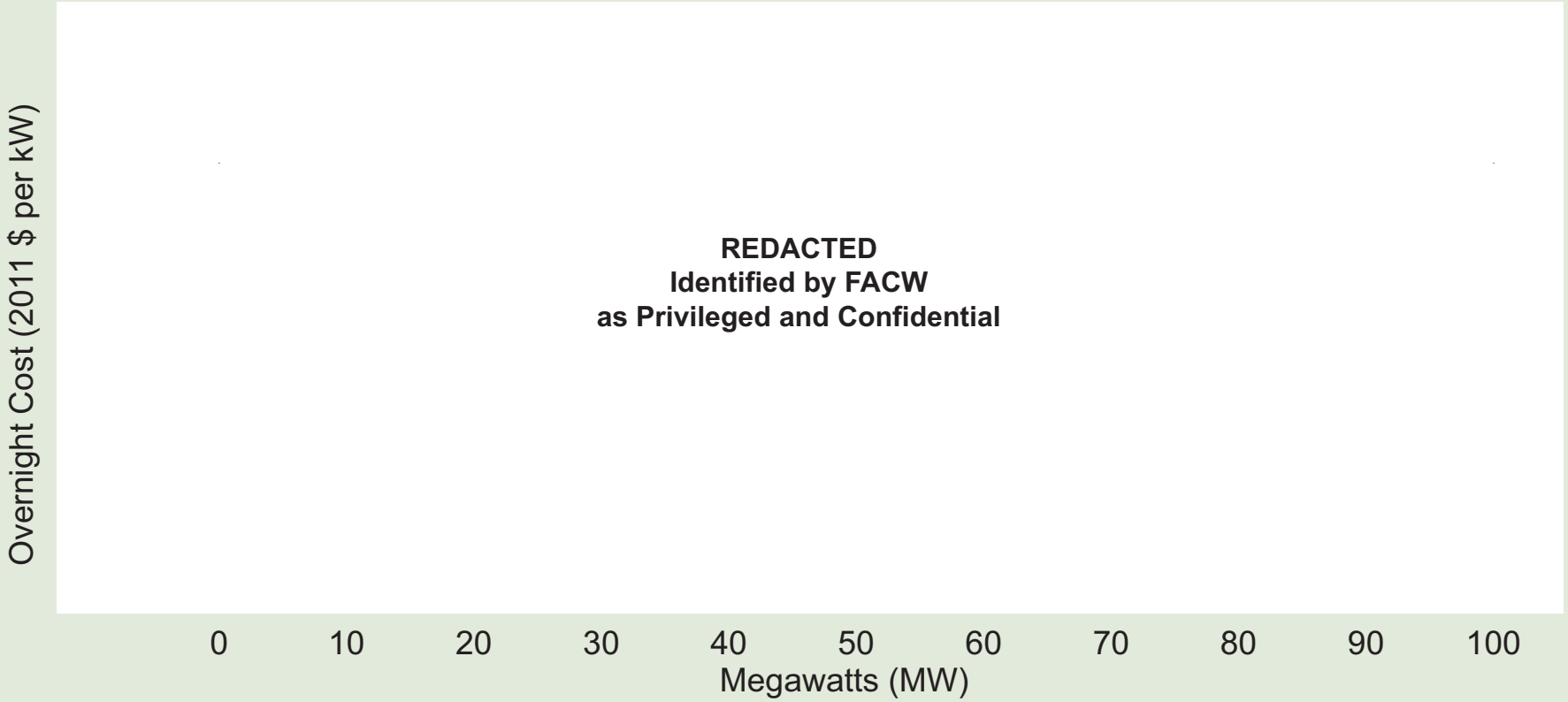
Comparison of FACW to Typical OSW Development Costs, Less than 100 MW

FACW's unit costs are still uncompetitive when compared to a limited sample of smaller offshore wind projects developed over the past several years.



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Recently-Announced U.S. OSW Projects

State	Project	Project Cost (million $)	Capacity (MW)	per Capacity Cost ($/kW)	Difference from FACW ($/kW)	Project Cost at FACW Capacity Cost (million $)
New Jersey	Fisherman's Energy	REDACTED Identified by FACW as Privileged and Confidential				
Massachusetts	Cape Wind	$ 2,620.0	468.0	$ 5,598		$ 5,259
Rhode Island	Deepwater Wind	$ 219.31	30.0	$ 7,310		$ 337
Delaware	NRG Bluewater	$ 1,000.00	450.0	$ 2,222		$ 5,057

Note: The cost of the FACW project and corresponding proposed OREC price used in this report is based upon the proforma provided in response to data request RCR-PF-3 and the rate impact analysis provided in response to data request RCR-PF-10. These files are the most recent complete financial analysis that is consistent with state statute received to date. These files are based on a MW facility with a total cost of $ million and a starting OREC price of $ /MWh. Since that time, FACW has provided additional OREC scenarios in discovery to Rate Counsel. However, those OREC proposals were not accompanied by the required proforma and cost accounting analysis as outlined by N.J.A.C. 14:8-6.5.

Source: 4C Offshore, http://www.4coffshore.com/; and In Re: Review of amended power purchase agreement between Narragansett Electric Company d/b/a National Grid and Deepwater Wind Block Island, LLC pursuant to R.I. Gen Laws 39-26.1-7. Rhode Island PUC, Docket No. 4185. August 16, 2010.

Recommendations: Project Economics

- FACW's development costs were compared, using differing statistical and sampling approaches, to other international OSW projects developed between 1998 and 2011. Exchange rate differentials between projects and time were corrected, and all dollars were converted to inflation-adjusted overnight dollars. The statistical methods used in this analysis controlled for various project differences such as capacity, year of development, offshore location, and water depth.
- FACW is still more expensive, by a considerable margin, than these recently-developed international projects. FACW is some $ /kW to $ /kW more expensive than these comparable projects: this translates into a **$ million to $ million overnight cost premium**.
- FACW is also some $ /kW to $ /kW more expensive than three recently-announced U.S. projects located in Massachusetts, Rhode Island, and Delaware.
- **FACW, if developed, will be the most expensive project in the world on a cost per kW basis.**

4. Project Finance

Project Finance: Capital Structure, Cost of Capital

Total Project Cost: $ million

The FACW project is anticipated to be highly leveraged with percent of its overall project finance coming in the form of two different construction loans.

Debt financing will be provided at a rate of percent

FACW anticipates close to $ million in project equity.

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Note: The cost of the FACW project and corresponding proposed OREC price used in this report is based upon the proforma provided in response to data request RCR-PF-3 and the rate impact analysis provided in response to data request RCR-PF-10. These files are the most recent complete financial analysis that is consistent with state statute received to date. These files are based on a MW facility with a total cost of $ million and a starting OREC price of $ MWh. Since that time, FACW has provided additional OREC scenarios in discovery to Rate Counsel. However, those OREC proposals were not accompanied by the required proforma and cost accounting analysis as outlined by N.J.A.C. 14:8-6.5.

[1] To be paid with cash grant.

Project Finance: Summary Proforma Assumptions

FACW Proforma
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Note: The cost of the FACW project and corresponding proposed OREC price used in this report is based upon the proforma provided in response to data request RCR-PF-3 and the rate impact analysis provided in response to data request RCR-PF-10. These files are the most recent complete financial analysis that is consistent with state statute received to date. These files are based on a MW facility with a total cost of $ million and a starting OREC price of $ MWh. Since that time, FACW has provided additional OREC scenarios in discovery to Rate Counsel. However, those OREC proposals were not accompanied by the required proforma and cost accounting analysis as outlined by N.J.A.C. 14:8-6.5.

Project Finance: Source of Financing

a subsidiary of XEMC New Energy, will take a in the FACW project. XEMC New Energy is owned primarily by XEMC Group, a company that is primarily owned by a provincial government entity that is part of the Peoples' Republic of China. If FACW is approved, percent of the profits of the FACW project is likely to leave both the U.S. and New Jersey.

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Source: Provided by FACW in response to an August 16, 2011 meeting with BPU Staff and Rate Counsel.

Ratepayer Financial Support Mechanism

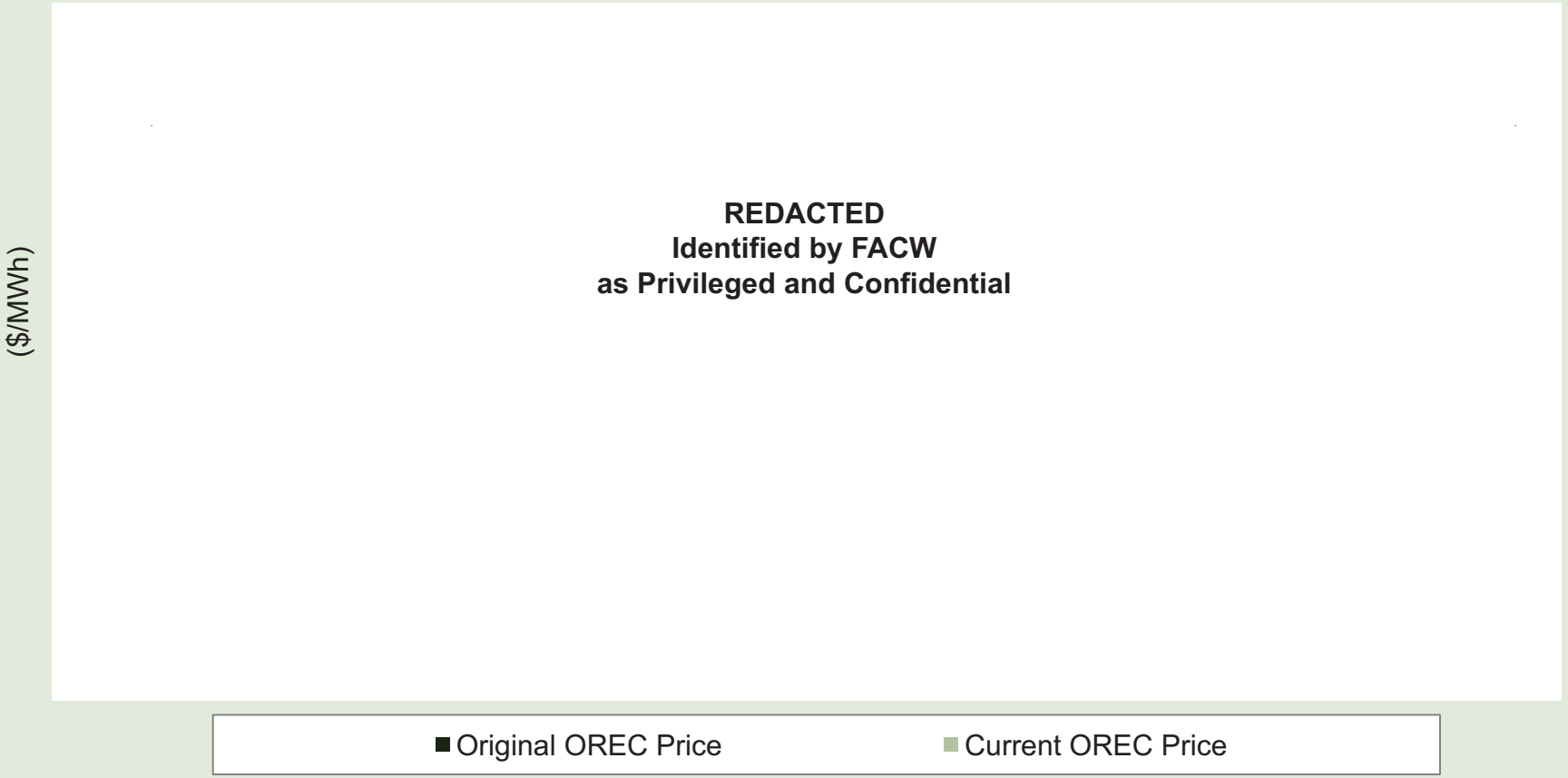
- Project investments will be securitized through a 15-year long-term OREC agreement approved by the Board.
- The OSWEDA requires the Board to establish:

  > "an offshore wind renewable energy certificate program to require that a percentage of the kilowatt hours sold in this State by each electric power supplier and each basic generation service provider be from offshore wind energy in order to support at least 1,100 megawatts of generation from qualified offshore wind projects." [N.J. Stat. § 48:3-87.]

- The Board is currently in rulemaking to define the terms and conditions for OREC financing and how proposals from eligible wind projects will be evaluated and ultimately approved.
- The FACW OREC proposal differs from the straw proposals currently under consideration by the Board and the stakeholders to the current OREC Rulemaking process.

OREC Proposal, Price

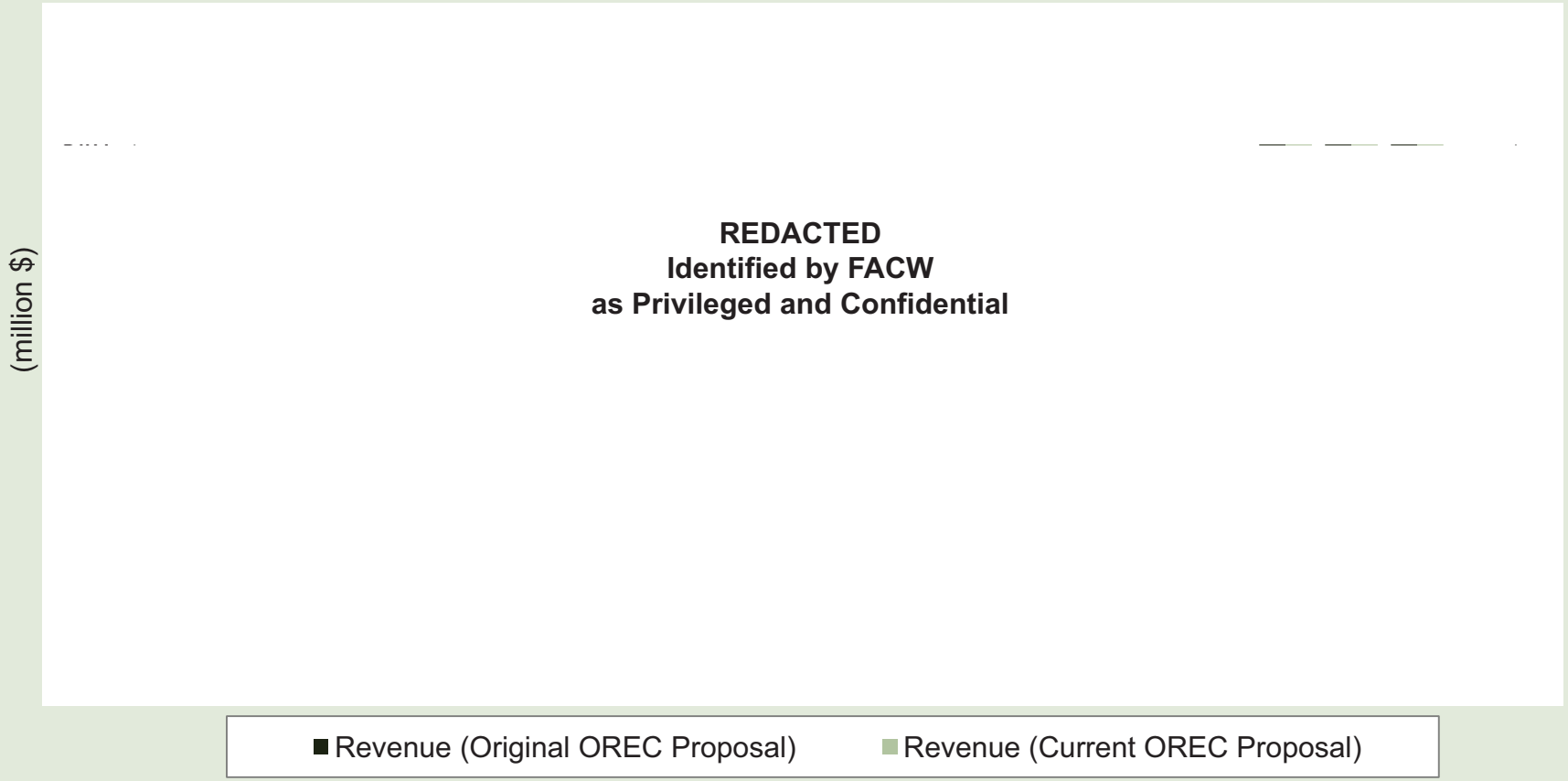
FACW has increased its requested unit value financial support from $ per OREC to $ per OREC. FACW is requesting a percent annual escalation factor to the initial OREC price. Over time, the ORECs collected on the proposed FACW will be as high as $ per OREC (or per MWh generated at the project).



Source:
Verified Petition, February 9, 2011, Exhibit A, Table 5.3; and Verified Petition, May 19, 2011, Exhibit A, Table 6.3.

OREC Proposal, Proposed Project Revenues

FACW's proposed OREC pricing will generate between $ million to over $ million in annual project revenues over the next twenty years. Total revenues collected under the current proposal will amount to over $ million, or $ million on an NPV basis.



Source:
Verified Petition, February 9, 2011, Exhibit A, Table 5.3; and Verified Petition, May 19, 2011, Exhibit A, Table 6.3.

OREC Proposal, FACW Estimated Project Earnings

FACW estimated that its proposed OREC pricing will generate between $ million to over $ million in annual earnings over the next twenty years. Total earnings under the current OREC proposal will amount to over $ million, or $ million on an NPV basis.

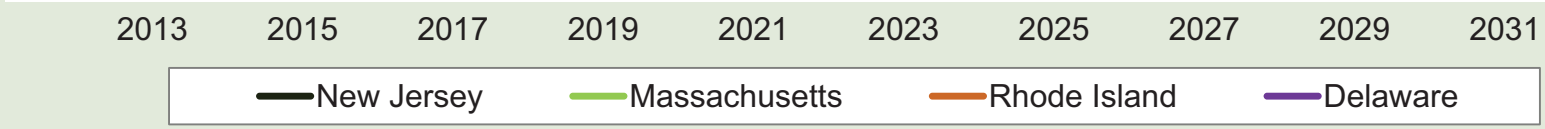
Note: The cost of the FACW project and corresponding proposed OREC price used in this report is based upon the proforma provided in response to data request RCR-PF-3 and the rate impact analysis provided in response to data request RCR-PF-10. These files are the most recent complete financial analysis that is consistent with state statute received to date. These files are based on a MW facility with a total cost of $ million and a starting OREC price of $ MWh. Since that time, FACW has provided additional OREC scenarios in discovery to Rate Counsel. However, those OREC proposals were not accompanied by the required proforma and cost accounting analysis as outlined by N.J.A.C. 14:8-6.5.

Comparison of Prices, Other State PPAs

FACW, if approved, will have the highest per MWh level of financial support of any currently proposed OSW project in the U.S. The FACW project will be percent higher, on a comparable per OREC (MWh) basis, than the next highest U.S. based project in Rhode Island.

State	Seller / Purchaser	Starting Price ($/MWh)	Annual Escalation (%)	Contract Duration (years)
New Jersey	**Fisherman's Energy / BPU**	**$**		
Massachusetts	Cape Wind / National Grid	$ 187.50	3.5%	15
Rhode Island[1]	Deepwater Wind / National Grid	$ 244.00	3.5%	20
Delaware[2]	NRG Bluewater / Delmarva	$ 140.23	2.5%	25

REDACTED
Identified by FACW
as Privileged and Confidential



Note: [1]The final price is dependent upon the construction cost; $244/MWh is the maximum price; [2]The PPA price for Delaware includes an energy price, capacity price and REC price. Source: Petition of Massachusetts Electric Company and Nantucket Electric Company, each d/b/a National Grid, for approval by the Department of Public Utilities of two long-term contracts to purchase wind power and renewable energy certificates, pursuant to St. 2008, c. 169, § 83 and 220 C.M.R. § 17.00 et seq., Massachusetts D.P.U., Docket No. 10-54. November 22, 2010; In Re: Review of amended power purchase agreement between Narragansett Electric Company d/b/a National Grid and Deepwater Wind Block Island, LLC pursuant to R.I. Gen Laws 39-26.1-7. Rhode Island PUC, Docket No. 4185. August 16, 2010; and In the matter of integrated resource planning for the provision of standard offer supply service by Delmarva Power & Light Company under 26 DEL. C. 1007(c) & (d): Review and approval of the request for proposals for the construction of new generation resources under 26 DEL. C. 1007(d). Delaware Public Service Commission, Docket No. 06-241. September 2, 2008.

Estimated ORECs Using Alternative Costs

OREC prices should be considerably lower for the FACW project.

If the FACW project faced a more reasonable, statistically-adjusted installed cost of $5,519/kW (consistent with the historic trend of projects constructed to date), the OREC needed to generate a percent ROE would only be $237.45.

FACW's starting OREC price is percent higher than the starting PPA price for Cape Wind (MA), percent higher than Deepwater Wind (RI) and percent higher NRG Bluewater (DE).

		FACW Proposal		Estimated Reasonable Cost
Total Project Cost (million $)	$		$	119.2
Total Project Cost ($/kW)	$		$	5,519
Starting OREC Price ($/MWh)	**$**		**$**	**237.45**
Return on Equity (%)				

Note: The cost of the FACW project and corresponding proposed OREC price used in this report is based upon the proforma provided in response to data request RCR-PF-3 and the rate impact analysis provided in response to data request RCR-PF-10. These files are the most recent complete financial analysis that is consistent with state statute received to date. These files are based on a MW facility with a total cost of $ million and a starting OREC price of $ MWh. Since that time, FACW has provided additional OREC scenarios in discovery to Rate Counsel. However, those OREC proposals were not accompanied by the required proforma and cost accounting analysis as outlined by N.J.A.C. 14:8-6.5.

Implied Rates of Return Using Alternative Costs

In today's market, a reasonable cost $5,519/kW OSW project receiving a $ OREC price would likely earn a windfall profit of over 22 percent.

Thus, the FACW project is either (a) too expensive or (b) proposing to receive a rate of return greatly in excess of what is needed to develop an OSW project along the eastern seaboard.

		FACW Proposal		Estimated Reasonable Cost
Total Project Cost (million $)	$		$	119.2
Total Project Cost ($/kW)	$		$	5,519
Starting OREC Price ($/MWh)	$		$	
Return on Equity (%)				**22.58%**

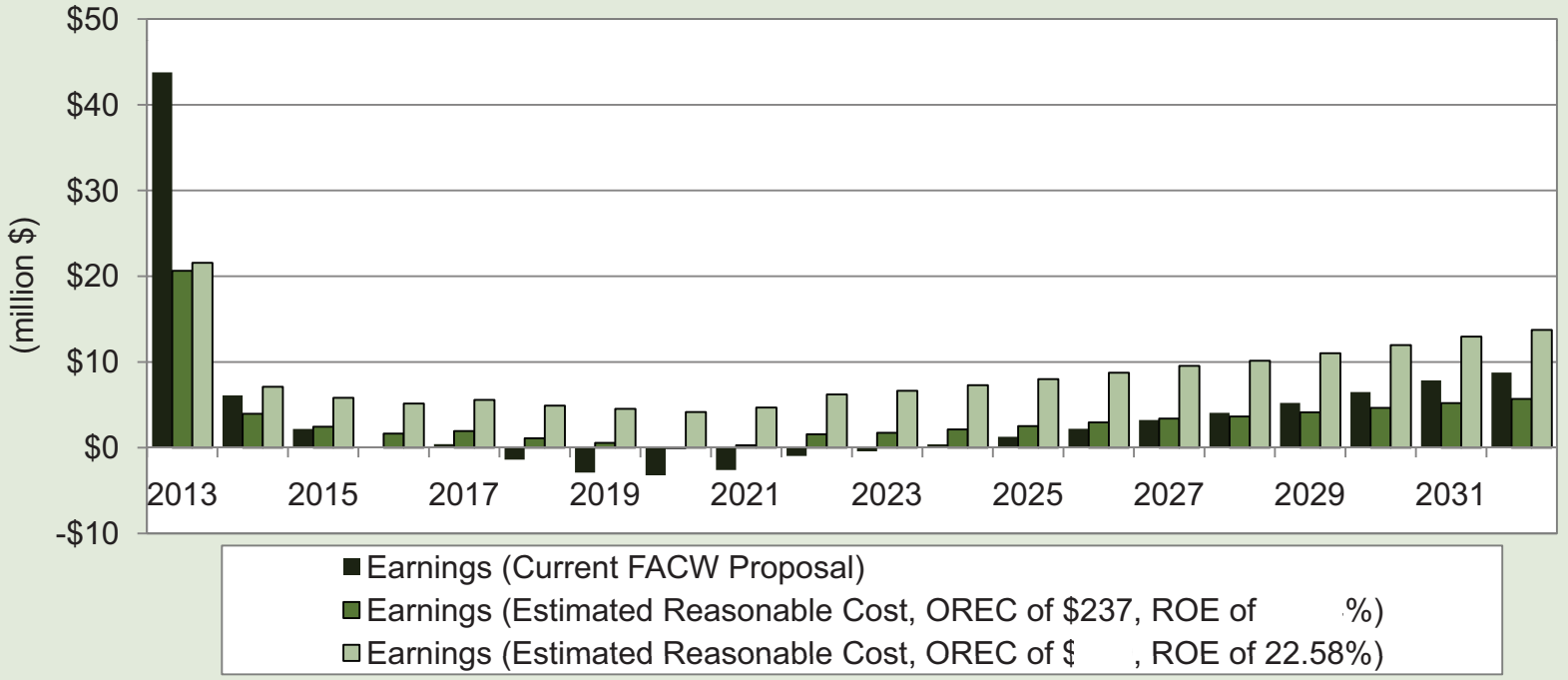
Note: The cost of the FACW project and corresponding proposed OREC price used in this report is based upon the proforma provided in response to data request RCR-PF-3 and the rate impact analysis provided in response to data request RCR-PF-10. These files are the most recent complete financial analysis that is consistent with state statute received to date. These files are based on a MW facility with a total cost of $ million and a starting OREC price of $ MWh. Since that time, FACW has provided additional OREC scenarios in discovery to Rate Counsel. However, those OREC proposals were not accompanied by the required proforma and cost accounting analysis as outlined by N.J.A.C. 14:8-6.5.

OREC Proposal, Comparison of Project Earnings Under Differing Cost Assumptions

FACW estimates total earnings under its the current proposal of over $ million, or $ million (NPV).

Total earnings using a reasonable (industry average) cost of $5,519/kW, and an OREC price proposal that reflects these costs ($237/OREC) would result in an ROE of %, and earnings of over $64 million, or $42.2 million (NPV).

Total earnings using a reasonable (industry average) cost of $5,519/kW, but FACW's current OREC proposal of /OREC will result in a ROE of 22.58% and result in earnings of over $170 million, or $94.7 million (NPV).



Note: The cost of the FACW project and corresponding proposed OREC price used in this report is based upon the proforma provided in response to data request RCR-PF-3 and the rate impact analysis provided in response to data request RCR-PF-10. These files are the most recent complete financial analysis that is consistent with state statute received to date. These files are based on a MW facility with a total cost of $ million and a starting OREC price of $ MWh. Since that time, FACW has provided additional OREC scenarios in discovery to Rate Counsel. However, those OREC proposals were not accompanied by the required proforma and cost accounting analysis as outlined by N.J.A.C. 14:8-6.5.

Recommendations: Project Finance, OREC Proposal

- FACW's OREC proposal is too high, not competitive with other proposed OSW projects in the U.S., and not in ratepayers' best interest.
- The uneconomic nature of FACW's OREC proposal appears to be based upon its high development costs. The development costs, however, appear to be orders of magnitude greater than other similarly-sized OSW projects.
- If the FACW projects were priced at a cost comparable to other similarly-sized OSW projects, the proposed project would be more affordable, and would have the potential to create ratepayer benefits.
- If the FACW project faced a cost comparable to other similarly-sized project, but still priced the project at an OREC starting at $, it, and XEMC would likely earn a return in excess of close to 23 percent.

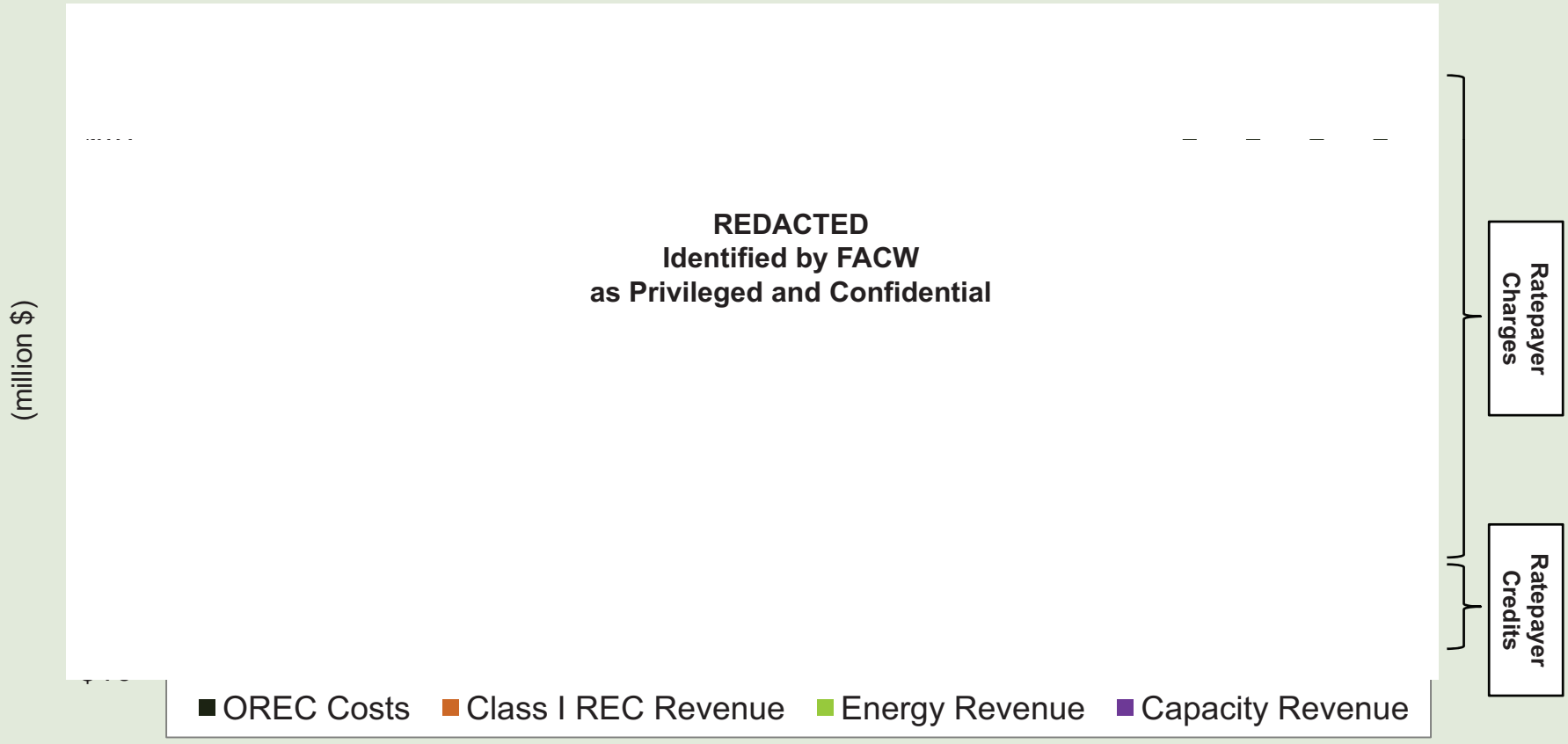
5. Project Rate Impacts

FACW Rate Impact Model: Overview of Approach

- FACW's application includes a rate impact model that attempts to estimate the net rate impacts associated with the proposed OREC plan. Costs, in the FACW rate impact model, are created by the negative rate impacts of the proposed OREC plan. OREC costs are offset by two different sets of offsetting credits or beneficial revenue streams.
- The first set of credits included in the FACW rate impact analysis include the energy revenue and capacity credits the project will sell into the PJM day-ahead market. These credits, while potentially incorrect, are still meaningful benefits that will be directly accounted and credited against ratepayer charges if the FACW project is developed.
- The second set of credits included in the FACW rate impact analysis are clearly more speculative and attempt to quantify such benefits as Class 1 REC savings, CO2 credit savings, and zero dispatch savings that are the regional electricity supply savings created by lowering the overall regional power supply curve. This second set of credits are highly speculative, and even if accurate, are not credits that will be itemized and directly credited against ratepayer OREC charges.

FACW Rate Impact Model: Estimated Rate Impacts

The FACW (net) rate impact estimates include a number of ratepayer charges (increases to rate impacts) and ratepayer credits (reductions to rate impacts).



Source:
Response to data request RCR-PF-10, Attachment "OSW Rate Impact ACTIVE Workfile v7.3.xlsx"

FACW Rate Impact Model: Unrealistic Assumptions

The FACW rate impact model includes a number of unrealistic assumptions that significantly bias its rate impact analysis. These unreasonable assumptions include:

- **Capacity credits** based upon a level of capacity far in excess of that commonly recognized by PJM for wind resources.
- Generous **capacity prices** far in excess of most reasonable market forecasts and expectations.
- Exceptionally **high Class 1 REC prices** far in excess of market expectations.
- **Carbon credits** and benefits that are in excess of the market and are tied to the RGGI market from which New Jersey has recently withdrawn.

Each of these unreasonable assumptions were revised based upon a number of different factors.

FACW Rate Impact Model: Assumed Capacity Availability

FACW Assumed Capacity Availability:

FACW used a capacity value of percent for 2013, then increased this value to percent for 2016 through 2033. The PJM manual, however, sets the effective class average capacity factors at 13 percent. Once a project has three or more years of "applicable operational data" a capacity value may be calculated.

FACW's rate impact model is in error and inconsistent with PJM operational requirements since the FACW model allows capacity to increase for the full course of year three, when the entire 12 months of year three data would be needed, at minimum, to meet the PJM requirement. Further, increasing the available capacity to percent, with no reasonably-measured data, for a new direct drive technology, that has no operational performance history anywhere in the world, places rate impact risk onto ratepayers if this capacity fails to materialize.

FACW's capacity assumptions will, other things being equal, tend to artificially increase project capacity revenues and reduce the project's rate impacts.

Model Correction for Revised Rate Impact Analysis:

Capacity value is set at 13 percent for the entire operating period.

FACW Rate Impact Model: Capacity Prices

FACW Assumed Future Capacity Prices:

FACW estimated its capacity prices using the Resource Clearing Price Forecast provided in the Long-Term Capacity Agreement Pilot Program ("LCAPP") proceeding.

The use of LCAPP-based prices is inappropriate for valuing potential OSW capacity sales since the use of the LCAPP prices will overstate the capacity revenues associated with the FACW project, and understate overall rate impacts.

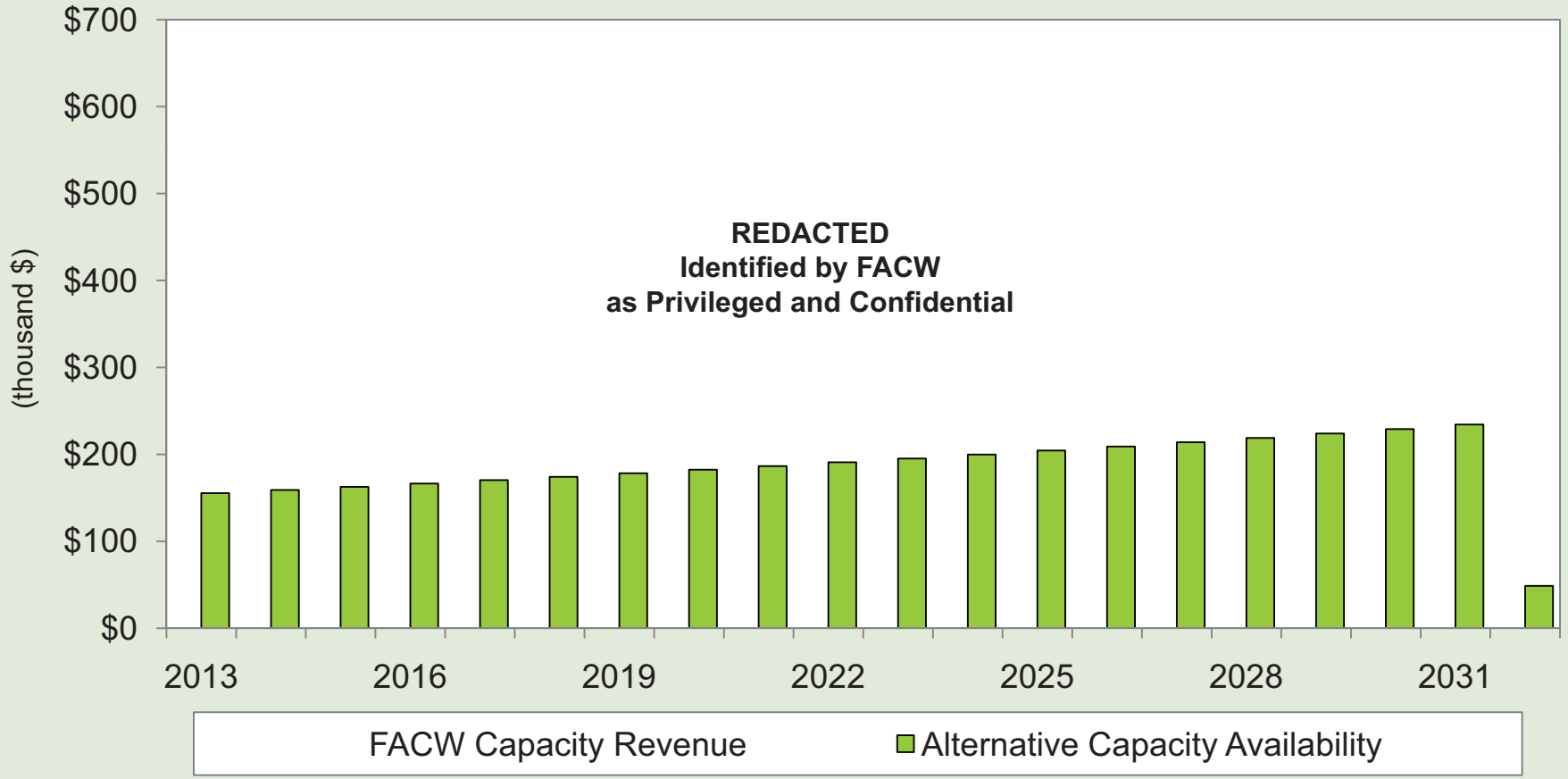
LCAPP-based prices were developed to show likely outcomes should new regional power generation capacity not be developed. Legislation, as well as Board action, have reduced the threat of these dire outcomes. More reasonable capacity price outcomes, based on the actions taken by New Jersey, are more appropriate.

Model Correction for Revised Rate Impact Analysis:

The addition of new regional generating capacity should result in a reduction to the RCP forecast. Prices for 2013, 2014 and 2015 were changed to reflect actual and updated data. For the remaining years, the forecast provided by FACW was reduced by 50 percent.

FACW Rate Impact Model: Alternative Capacity Prices and Revenues

FACW's anticipated capacity revenues total $ million (or $ million NPV). The use of alternative capacity prices results in $3.7 million (or $2.1 million NPV) in total capacity revenues.



FACW Rate Impact Model: Assumed Class 1 REC Prices

FACW Assumed Future Class I REC Prices:

FACW assumes an aggressive and artificially escalated rate of increase in Class I REC prices. These assumptions will increase the Class I REC credit included in FACW's rate impact analysis, and in doing so, will reduce the overall rate impact of the FACW project.

FACW's rate impact model assumes Class I REC prices will increase from $ in 2013, to $ in 2014; to $ in 2015; and $ in 2016. This represents an average annual Class I REC price increase of some 161 percent between 2013 and 2016

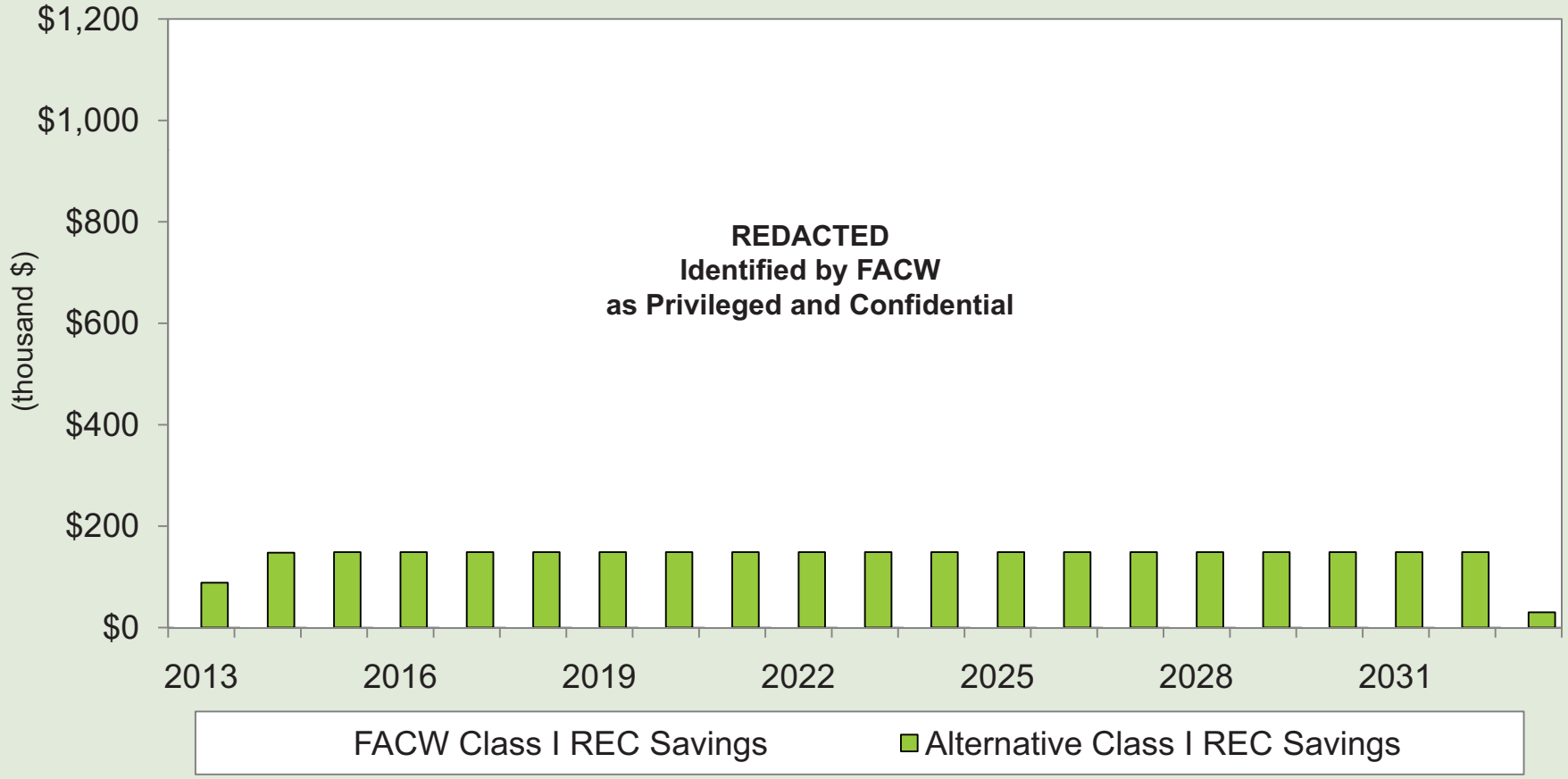
The 2010 OCE RPS Draft report shows that Class I REC prices are currently at $2.00 and have been falling since 2009.

Model Correction for Revised Rate Impact Analysis:

Class I REC Prices will stay low and constant at $2.00.

FACW Rate Impact Model: Alternative Class I REC Savings

FACW's anticipated Class I REC savings total $ million (or $ million NPV).
The corrected Class I REC savings total $2.9 million (or $1.7 million NPV).



FACW Rate Impact Model – Carbon Prices

FACW Assumed Carbon Credits:

FACW applies a revenue credit for project wholesale power sales against project OREC costs in its rate impact model. FACW assumes the wholesale prices it receives for its project sales will be based on PJM Locational Margin Prices ("LMP"), with a CO_2 adder. LMPs are based on the cost of supplying the next megawatt of load at a specific location or node and takes into account bid prices for generation, the flow of power within the transmission system and power transfer constraints.

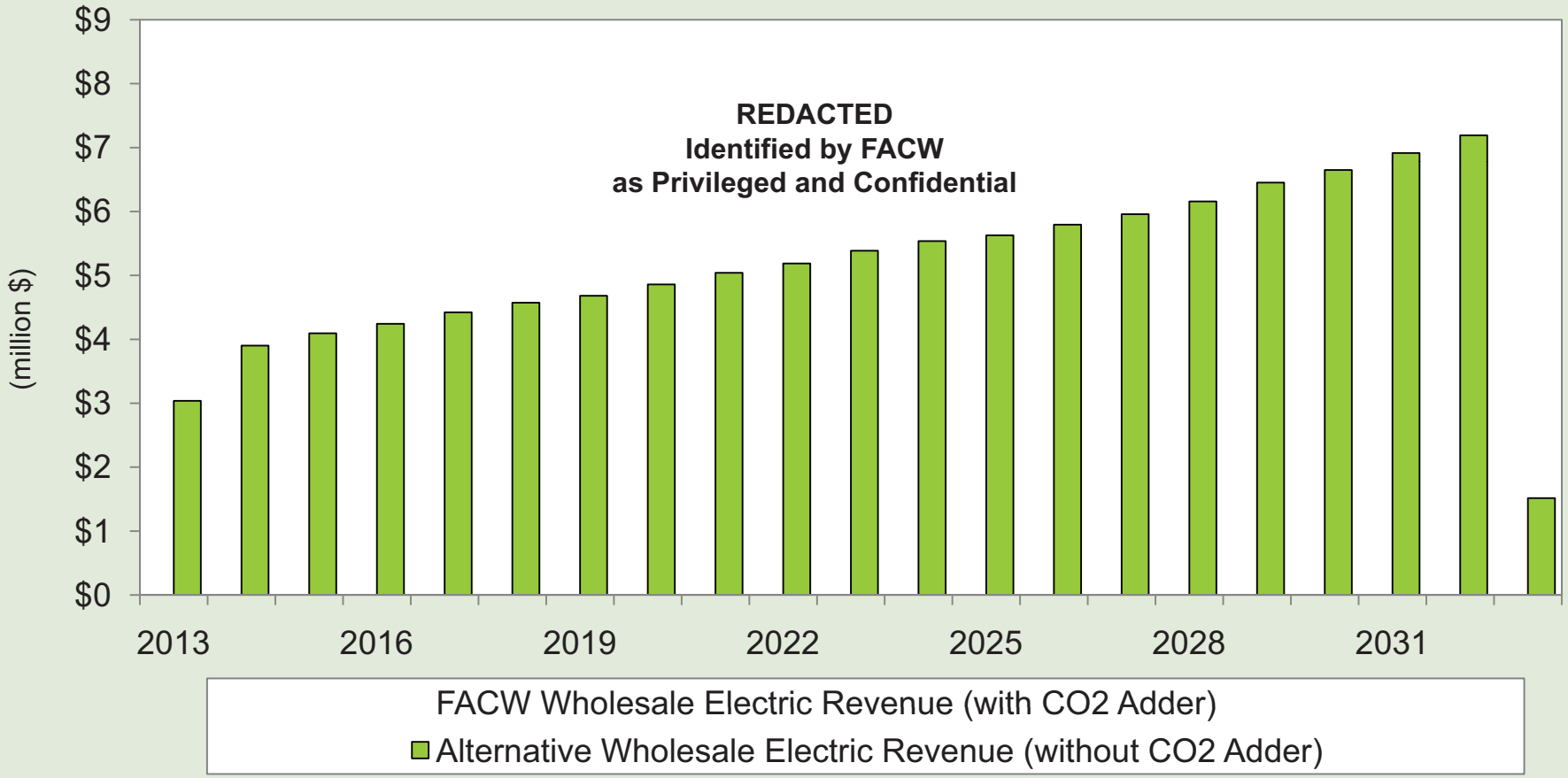
PJM prices should already be reflective of any additive emissions impacts since emission credits are a cost of generation that should be reflected in bid prices. Thus no additional credit is needed. Further, New Jersey no longer participates in RGGI and, renewable energy projects, such as FACW typically declare whether they are receiving RECs or offsets, but can usually not take advantage of both. Thus, FACW's inclusion of this additional revenue streak is inappropriate.

Model Correction for Revised Rate Impact Analysis:

Remove the CO_2 adder from FACW's assumed wholesale prices.

FACW Rate Impact Model: Alternative Wholesale Energy Revenues (without CO_2 Credits)

FACW's anticipated wholesale electric revenues total $ million (or $ million NPV).
The corrected Class I REC savings total $107.2 million (or $57.1 million NPV).



FACW Rate Impact Model – Wholesale Energy Prices

FACW Assumed Future Wholesale Energy Prices:

As noted earlier, FACW applies a revenue credit for project wholesale power sales against project OREC costs in its rate impact model. FACW based its forecast of wholesale energy prices it receives for its project sales on PJM LMPs as well as EIA's 2010 Annual Energy Outlook and NYMEX PJM forward market data.

When asked for the file used to calculate the forecasted wholesale prices used in its analysis, FACW responded that the "original spreadsheet and source data used to derive the wholesale prices … was inadvertently saved over and is not available." To recreate the original wholesale forecast, FACW used EIA's retail cost data to calculate long-term annual escalation rates rather than the wholesale generation cost data.

Model Correction for Revised Rate Impact Analysis:

No changes were made relative to FACW's original filing and original wholesale energy forecast.

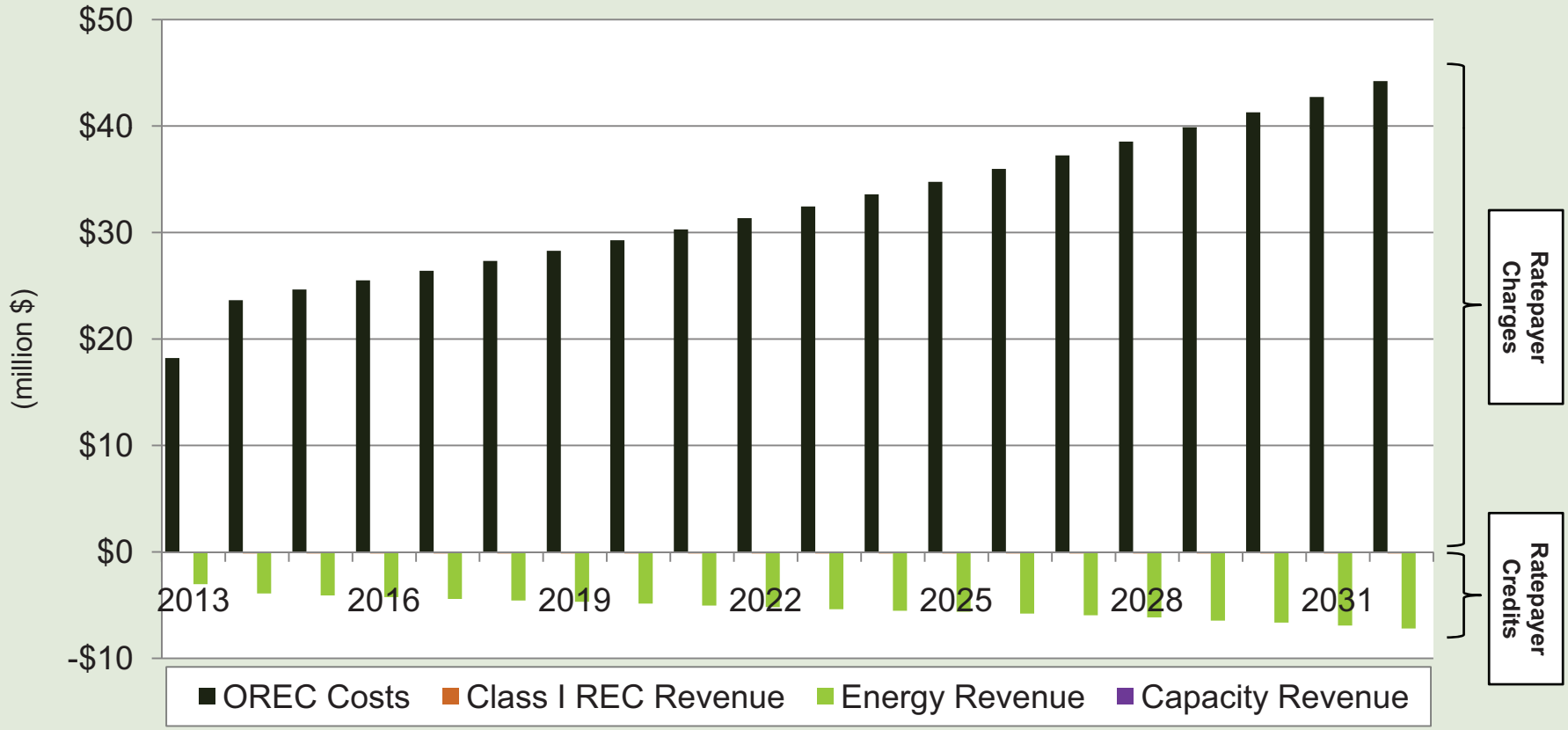
Revised Rate Impact Model and Results

The revised rate impact analysis shows that the proposed FACW project will require a total of $345.2 million (NPV) in ratepayer support. This is offset by over $58.8 in REC, energy, and capacity revenue savings leading to a total net rate increase of over $286.3 million (NPV). On average, ratepayers will provide financial support to the FACW project of $15 million to $37 million per year.

	OREC Costs	Class I REC Savings	Energy Revenue	Capacity Revenue	Total Cost	Cost by Rate Class			
						Residential	Commercial	Industrial	Total
	---------- (million $) ----------					---------- (million $) ----------			
2013	$ 18.2	$ 0.09	$ 3.0	$ 0.01	**$ 15.1**	$ 5.5	$ 8.0	$ 1.6	**$ 15.1**
2014	23.6	0.15	3.9	0.00	**19.6**	7.1	10.4	2.1	**19.6**
2015	24.6	0.15	4.1	0.00	**20.4**	7.4	10.8	2.2	**20.4**
2016	25.5	0.15	4.2	0.00	**21.1**	7.6	11.3	2.2	**21.1**
2017	26.4	0.15	4.4	0.00	**21.8**	7.8	11.7	2.3	**21.8**
2018	27.3	0.15	4.6	0.00	**22.6**	8.1	12.1	2.4	**22.6**
2019	28.3	0.15	4.7	0.00	**23.4**	8.4	12.6	2.5	**23.4**
2020	29.3	0.15	4.9	0.00	**24.3**	8.6	13.1	2.5	**24.3**
2021	30.3	0.15	5.0	0.00	**25.1**	8.9	13.6	2.6	**25.1**
2022	31.4	0.15	5.2	0.00	**26.0**	9.2	14.1	2.7	**26.0**
2023	32.5	0.15	5.4	0.01	**26.9**	9.5	14.7	2.8	**26.9**
2024	33.6	0.15	5.5	0.01	**27.9**	9.8	15.3	2.9	**27.9**
2025	34.8	0.15	5.6	0.01	**29.0**	10.1	15.9	3.0	**29.0**
2026	36.0	0.15	5.8	0.01	**30.0**	10.5	16.5	3.0	**30.0**
2027	37.2	0.15	6.0	0.01	**31.1**	10.8	17.2	3.1	**31.1**
2028	38.5	0.15	6.2	0.01	**32.2**	11.1	17.8	3.2	**32.2**
2029	39.9	0.15	6.5	0.01	**33.3**	11.5	18.5	3.3	**33.3**
2030	41.3	0.15	6.6	0.01	**34.5**	11.8	19.2	3.4	**34.5**
2031	42.7	0.15	6.9	0.01	**35.7**	12.2	19.9	3.5	**35.7**
2032	44.2	0.15	7.2	0.01	**36.9**	12.6	20.7	3.6	**36.9**
2033	$ 1.9	$ 0.03	$ 1.5	$ 0.01	**$ 0.3**	$ 0.1	$ 0.2	$ 0.0	**$ 0.3**
Total	**$ 647.5**	**$ 2.95**	**$ 107.2**	**$ 0.11**	**$ 537.2**	**$ 188.6**	**$ 293.5**	**$ 55.1**	**$ 537.2**
NPV	**$ 345.2**	**$ 1.66**	**$ 57.1**	**$ 0.06**	**$ 286.3**	**$ 101.2**	**$ 155.6**	**$ 29.6**	**$ 286.3**

Revised Annual Rate Impacts

The revised rate impact analysis shows that the proposed FACW will likely have considerable net increases in rates across the entire time period in which it is in operation. Approval of the FACW project, based upon its current costs, configuration, and proposed OREC plan, will likely cost ratepayers some $286.3 million in NPV terms.



Rate Impact Comparison: Original FACW Analysis to Revised Rate Impact Results

FACW estimates between $ million to $ million in annual ratepayer costs to support its OSW project. The revised rate impact analysis shows that the impacts are likely between 4 percent and 8.5 percent higher than the original FACW rate impacts.

	FACW Net Rate Impacts				Revised Net Rate Impacts			
	Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial	Total
	($/customer)				($/customer)			
2013					$ 1.56	$ 16.14	$ 122.24	$ 3.74
2014					2.01	20.85	158.13	4.81
2015					2.07	21.58	163.95	4.97
2016					2.12	22.21	168.95	5.10
2017					2.17	22.82	173.91	5.23
2018					2.22	23.49	179.28	5.37
2019	REDACTED				2.29	24.23	185.19	5.53
2020	Identified by FACW				2.34	24.93	190.78	5.67
2021	as Privileged and Confidential				2.40	25.64	196.53	5.82
2022					2.46	26.42	202.79	5.98
2023					2.52	27.17	208.86	6.13
2024					2.59	28.00	215.57	6.31
2025					2.66	28.91	222.95	6.50
2026					2.73	29.78	230.01	6.67
2027					2.80	30.69	237.32	6.86
2028					2.87	31.59	244.64	7.04
2029					2.94	32.42	251.51	7.21
2030					3.01	33.39	259.41	7.41
2031					3.09	34.33	267.07	7.60
2032					3.16	35.29	274.95	7.79
2033					$ 0.03	$ 0.31	$ 2.44	$ 0.07

Generalization of the FACW Rate Impacts to the Entire OSW RPS: Rate Impacts

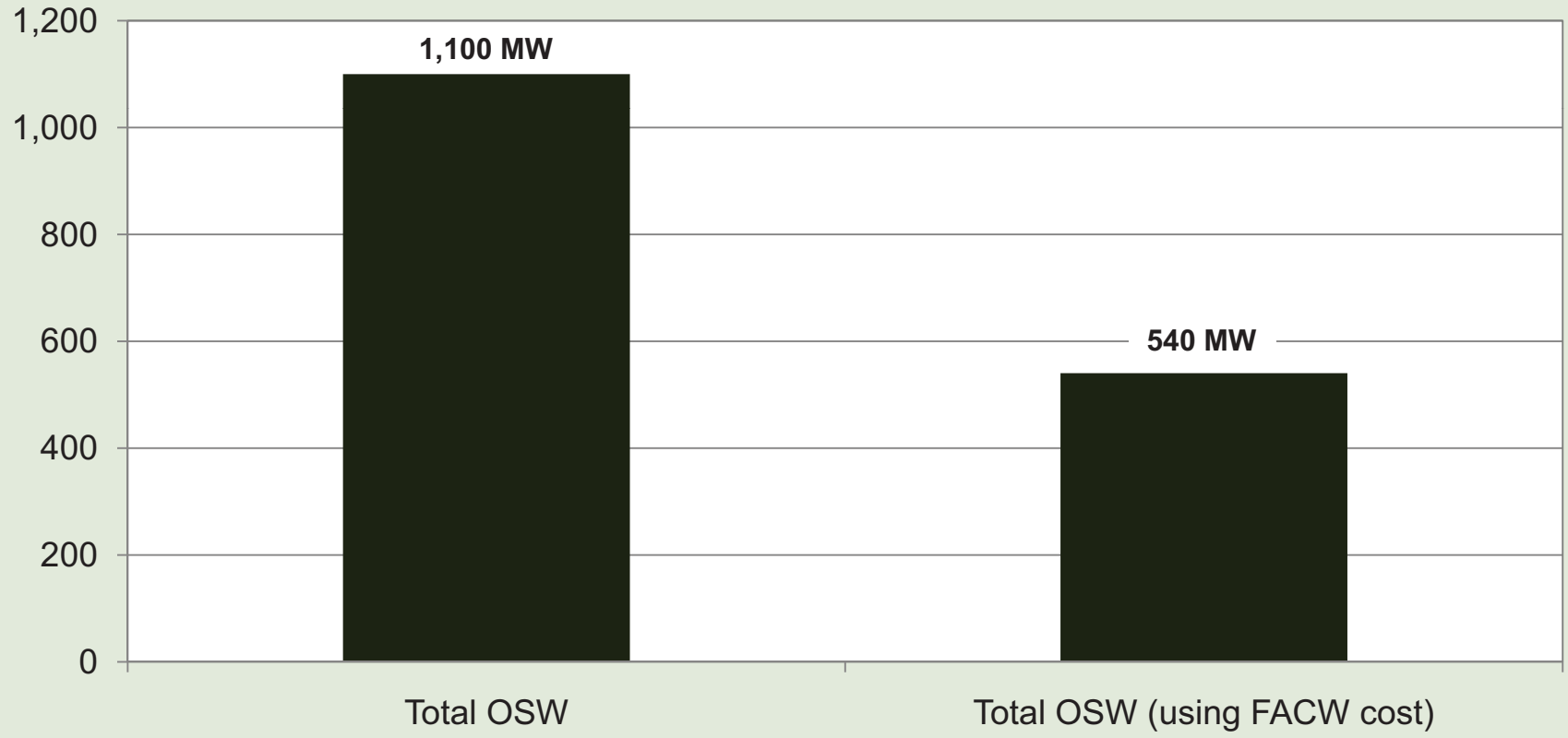
The proposed FACW OSW project, while very expensive on a per unit basis, is very small compared to other OSW projects. Thus, the rate impacts may appear to be moderate, particularly when examined on a per customer basis.

The magnitude of the FACW rate impacts become more apparent if the unit costs are applied to the entire OSW RPS goal of 1,100 MW. If the entire 1,100 MW OSW goal were met with project costs and rate impacts comparable to FACW's proposal, New Jersey ratepayers would be funding up to $1.7 billion, in addition to their normal utility payments, each year.

	OREC Costs	Class I REC Savings	Energy Revenue	Capacity Revenue	Total Cost	Cost by Rate Class				Net Rate Impacts			
						Residential	Commercial	Industrial	Total	Residential	Commercial	Industrial	Total
	---------- (million $) ----------					---------- (million $) ----------				---------- ($/customer) ----------			
2013	$ 834.6	$ 4.05	$ 139.2	$ 0.01	$ 691.3	$ 251.7	$ 365.4	$ 74.3	$ 691.3	$ 71.48	$ 740.02	$ 5,605.26	$ 171.32
2014	1,083.5	6.77	178.8	0.00	898.0	325.8	476.1	96.1	898.0	91.93	955.64	7,249.24	220.68
2015	1,129.5	6.82	187.7	0.00	935.0	338.1	497.3	99.6	935.0	94.79	989.30	7,515.72	227.89
2016	1,169.1	6.82	194.5	0.00	967.7	348.8	516.3	102.7	967.7	97.15	1,017.98	7,745.13	233.91
2017	1,210.0	6.82	202.7	0.00	1,000.5	359.4	535.5	105.7	1,000.5	99.46	1,046.31	7,972.54	239.82
2018	1,252.3	6.82	209.6	0.00	1,035.9	370.8	556.1	108.9	1,035.9	101.97	1,077.00	8,218.55	246.23
2019	1,296.2	6.82	214.6	0.00	1,074.8	383.5	578.8	112.5	1,074.8	104.76	1,110.87	8,489.70	253.34
2020	1,341.5	6.82	222.7	0.00	1,112.0	395.4	600.7	115.9	1,112.0	107.33	1,142.69	8,745.83	259.95
2021	1,388.5	6.82	231.1	0.00	1,150.6	407.7	623.4	119.4	1,150.6	109.96	1,175.37	9,009.37	266.72
2022	1,437.1	6.82	237.8	0.01	1,192.5	421.1	648.1	123.2	1,192.5	112.84	1,210.99	9,296.18	274.11
2023	1,487.4	6.82	246.9	0.01	1,233.6	434.2	672.5	126.9	1,233.6	115.58	1,245.41	9,574.71	281.20
2024	1,539.4	6.82	253.7	0.01	1,278.9	448.6	699.3	131.0	1,278.9	118.64	1,283.46	9,881.93	289.07
2025	1,593.3	6.82	257.9	0.01	1,328.6	464.4	728.7	135.5	1,328.6	122.03	1,325.42	10,220.19	297.77
2026	1,649.1	6.82	265.5	0.01	1,376.7	479.6	757.4	139.8	1,376.7	125.20	1,365.36	10,543.79	305.98
2027	1,706.8	6.82	273.1	0.01	1,426.9	495.3	787.4	144.2	1,426.9	128.48	1,406.70	10,879.20	314.46
2028	1,766.5	6.82	282.2	0.01	1,477.5	511.1	817.7	148.7	1,477.5	131.72	1,447.93	11,214.75	322.86
2029	1,828.4	6.82	295.8	0.01	1,525.8	526.0	847.0	152.8	1,525.8	134.68	1,486.36	11,529.53	330.61
2030	1,892.4	6.82	304.7	0.01	1,580.8	543.0	880.1	157.6	1,580.8	138.15	1,530.75	11,891.60	339.63
2031	1,958.6	6.82	316.9	0.01	1,634.8	559.6	912.9	162.3	1,634.8	141.45	1,573.62	12,242.82	348.27
2032	2,027.2	6.82	329.6	0.01	1,690.7	576.7	946.9	167.1	1,690.7	144.83	1,617.66	12,604.13	357.12
2033	$ 86.2	$ 1.38	$ 69.5	$ 0.01	$ 15.4	$ 5.2	$ 8.6	$ 1.5	$ 15.4	$ 1.30	$ 14.60	$ 113.93	$ 3.22
Total	**$ 29,677.8**	**$ 135.04**	**$ 4,914.6**	**$ 0.11**	**$ 24,628.0**	**$ 8,646.1**	**$ 13,456.3**	**$ 2,525.7**	**$ 24,628.0**	**$ 2,293.72**	**$ 24,763.44**	**$ 190,544.10**	**$ 5,584.14**
NPV	**$ 15,820.5**	**$ 76.02**	**$ 2,617.5**	**$ 0.06**	**$ 13,127.0**	**$ 4,638.4**	**$ 7,131.1**	**$ 1,357.5**	**$ 13,127.0**	**$ 1,245.70**	**$ 13,347.58**	**$ 102,415.15**	**$ 3,024.15**

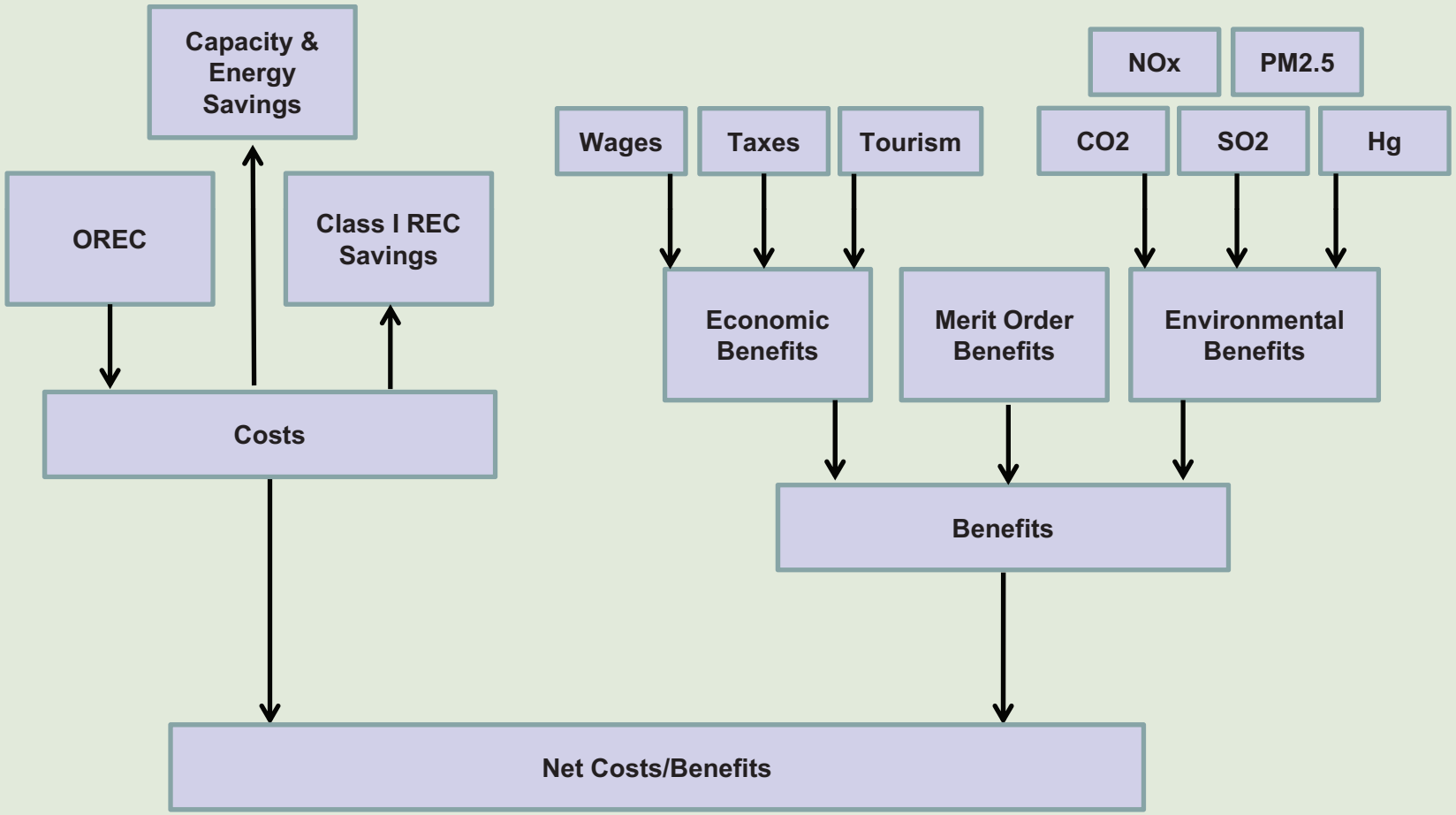
Generalization of the FACW Rate Impacts to the Entire OSW RPS: Capacity Development

Using an estimated reasonable cost of $5,519/kW, the development of 1,100 MW in OSW would cost approximately $6.07 billion. If the $6.07 billion estimate were used as a budget to finance all NJ OSW projects, at a cost comparable to FACW, the state would only be able to afford 540 MW.



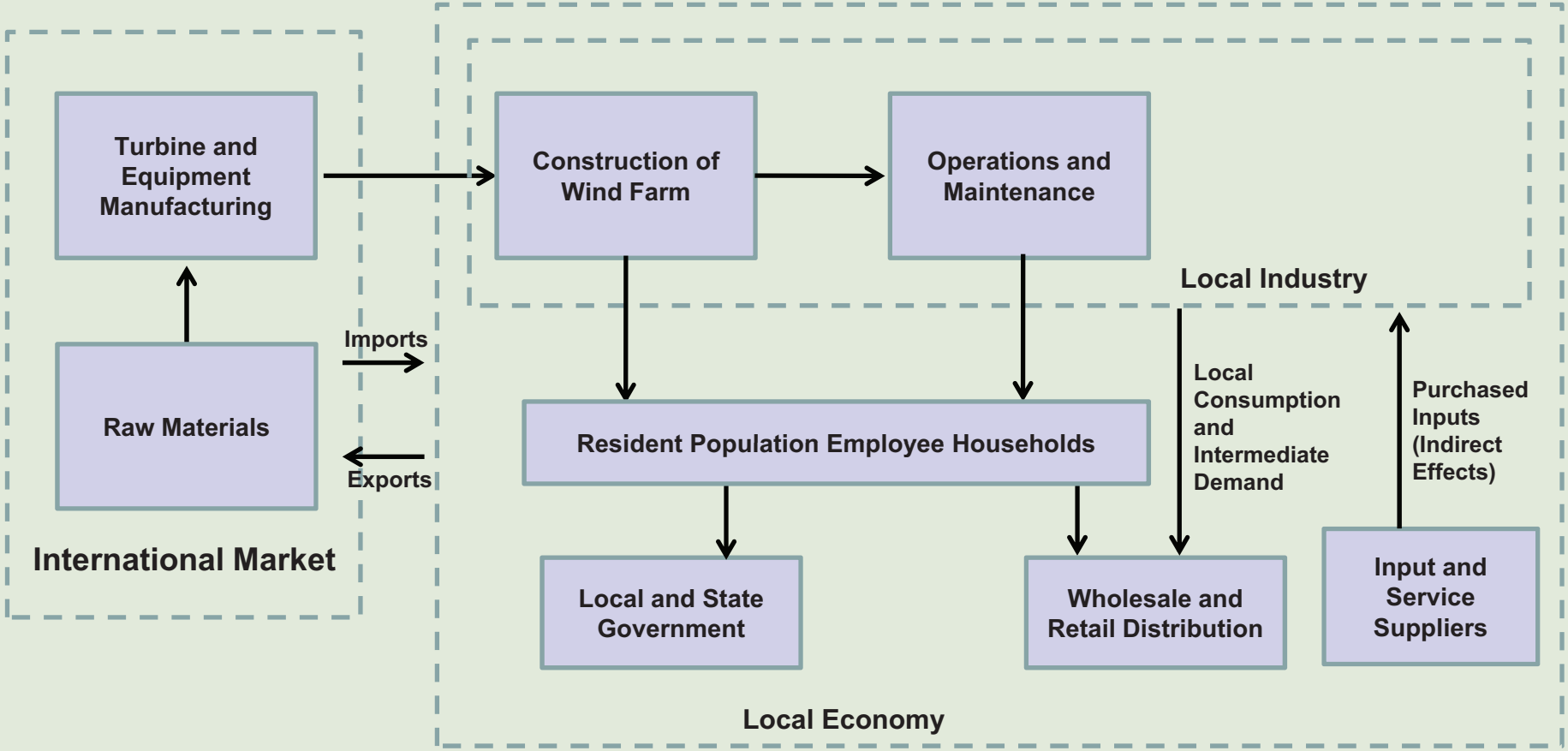
6. Project Net Economic Benefits

FACW Methodology & Results



Economic Value Chain of Green Power

The turbines and equipment are exported from overseas and the constructed here in the United States. Once constructed, workers will be needed to operate the wind farms. This will create local jobs that will create tax impacts for local governments and stimulate local wholesalers and retailers. Other input services will be contracted out to help maintain the local wind turbine industry.



Tourism Assumptions

FACW's net benefits rely very heavily on tourism impacts. FACW assumes that a large number of tourists will visit the FACW windfarm. These tourists are anticipated to create a significant positive economic impact offsetting the negative economic impacts from the OREC-price induced rate increase.

While some tourists are likely to visit the FACW project, FACW has significantly overstated the potential number of visitors and their corresponding economic impacts.

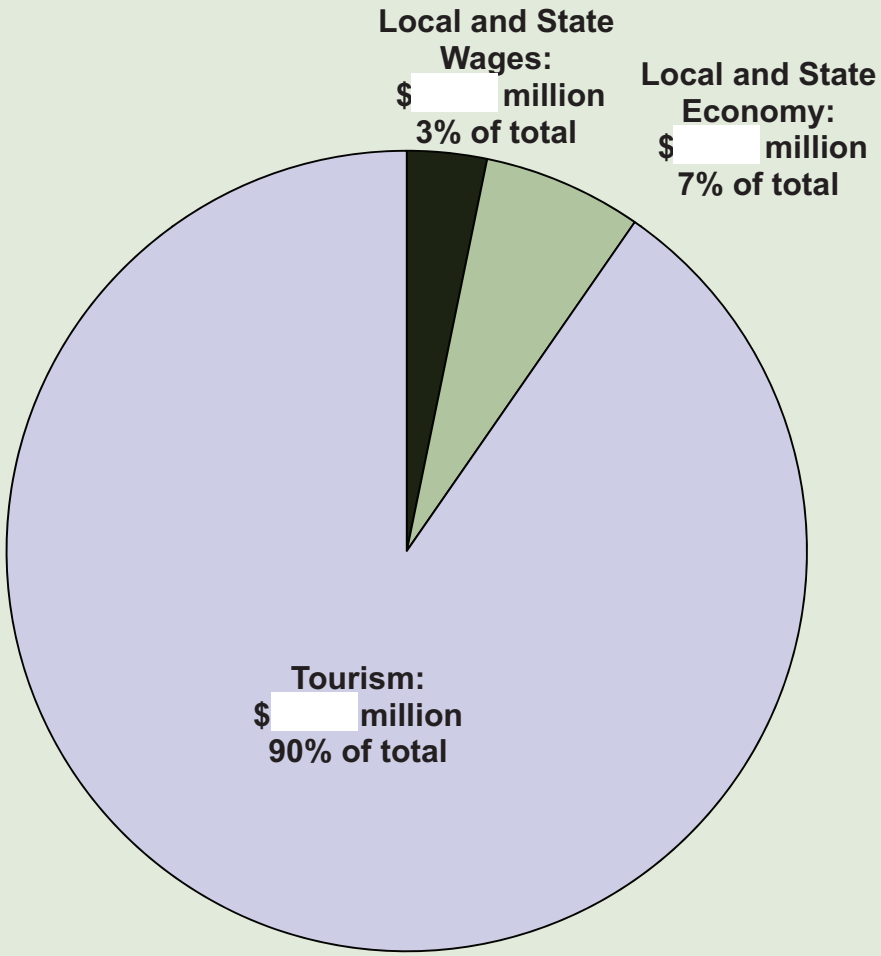
FACW, for instance, anticipates having more visitors each year than the Scroby Sands OSW farm (U.K.), the Baseball Hall of Fame in Cooperstown, NY and the Washington Monument.

Site	Location	Annual Visitors
Scroby Sands Offshore Wind Farm	Offshore Great Yarmouth, UK	35,000
Thomas Edison National Historical Park	West Orange, NJ	63,009
George Washington Birthplace National Monument	Westmoreland County, VA	128,158
Flight 93 National Memorial	Stoystown, PA	137,837
Harper's Ferry	Harpers Ferry, WV	268,822
Washington Crossing Historic Park	Washington Crossing, PA	300,000
Baseball Hall of Fame	Cooperstown, NY	300,000
U.S.S. Constitution	Boston, MA	303,360
Antietam National Battleground	Sharpsburg, MD	393,957
Children's Museum of Manhattan	New York, NY	400,000
Governors Island National Monument	New York, NY	409,207
Wright Brothers National Memorial	Kill Devil Hills, NC	476,200
Washington Monument	Washington D.C.	628,665
Fisherman's Energy Offshore Wind Farm[1]	**Offshore, Atlantic City, NJ**	**705,090**
Giants Games (9 home games)	East Rutherford, NJ	742,500
Mystic Aquarium	Mystic, CT	800,000
Museum of Fine Arts	Boston, MA	911,216
Gettysburg National Military Park	Gettysburg, PA	1,031,554
Smithsonian American Art Museum	Washington, D.C.	1,100,000
Getty Center/Getty Museum	Los Angeles, CA	1,205,685
Museum of Modern Art, New York	New York, NY	3,131,238
Yankees Games (81 home games)	New York, NY	3,653,680
Statute of Liberty	New York, NY	3,833,288
Yosemite National Park	Sierra Nevada, California	3,901,408
Grand Canyon National Park	Northwest Arizona	4,388,386
Louvre	Paris, France	8,500,000

Note: [1] The annual visitors for FACW are estimated as the additional number of tourists visiting Atlantic City because of the wind farm, as implied by FACW's tourism economic benefits. This does not include visitors such as day-trip residents; local school groups; association field trips; or tourists already visiting Atlantic City.

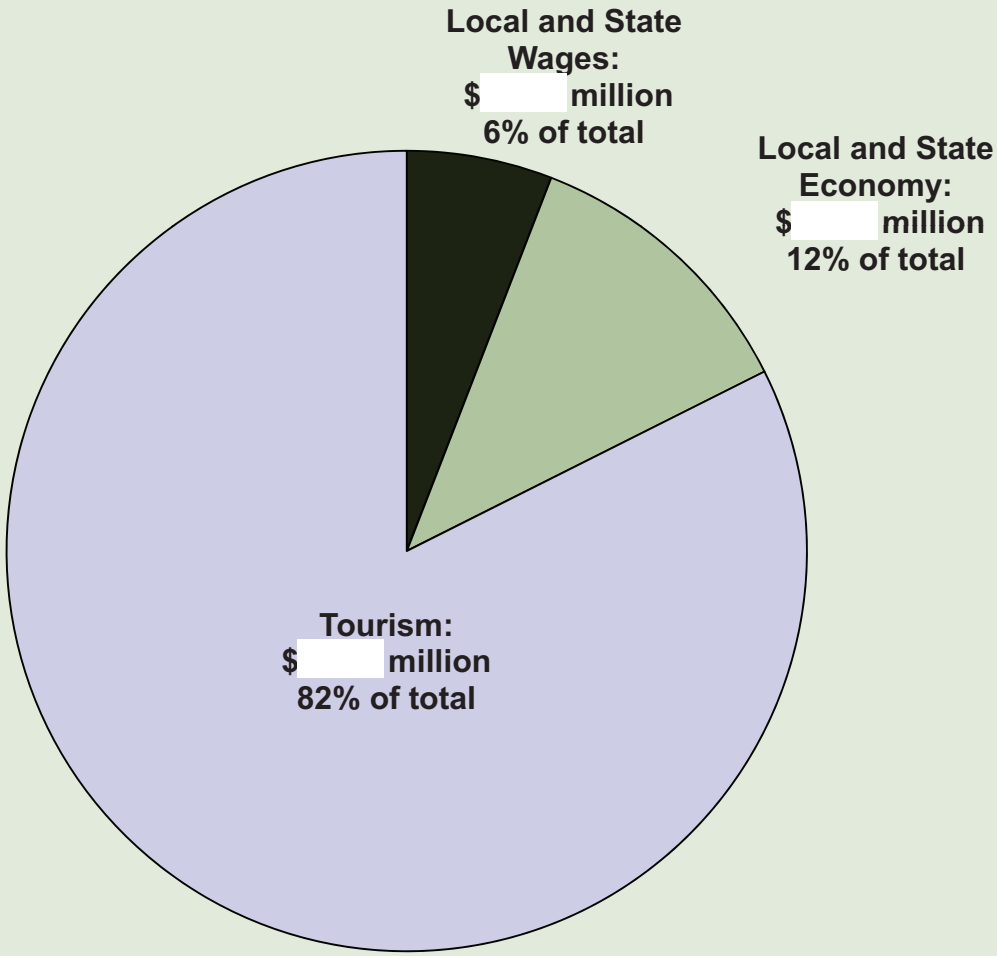
FACW Economic Benefits, if All Tourism Assumptions are Included

Approximately 90 percent of FACW's estimated net benefits are based on tourism.



Revised FACW Net Economic Benefits, (Reduced Tourism Benefits)

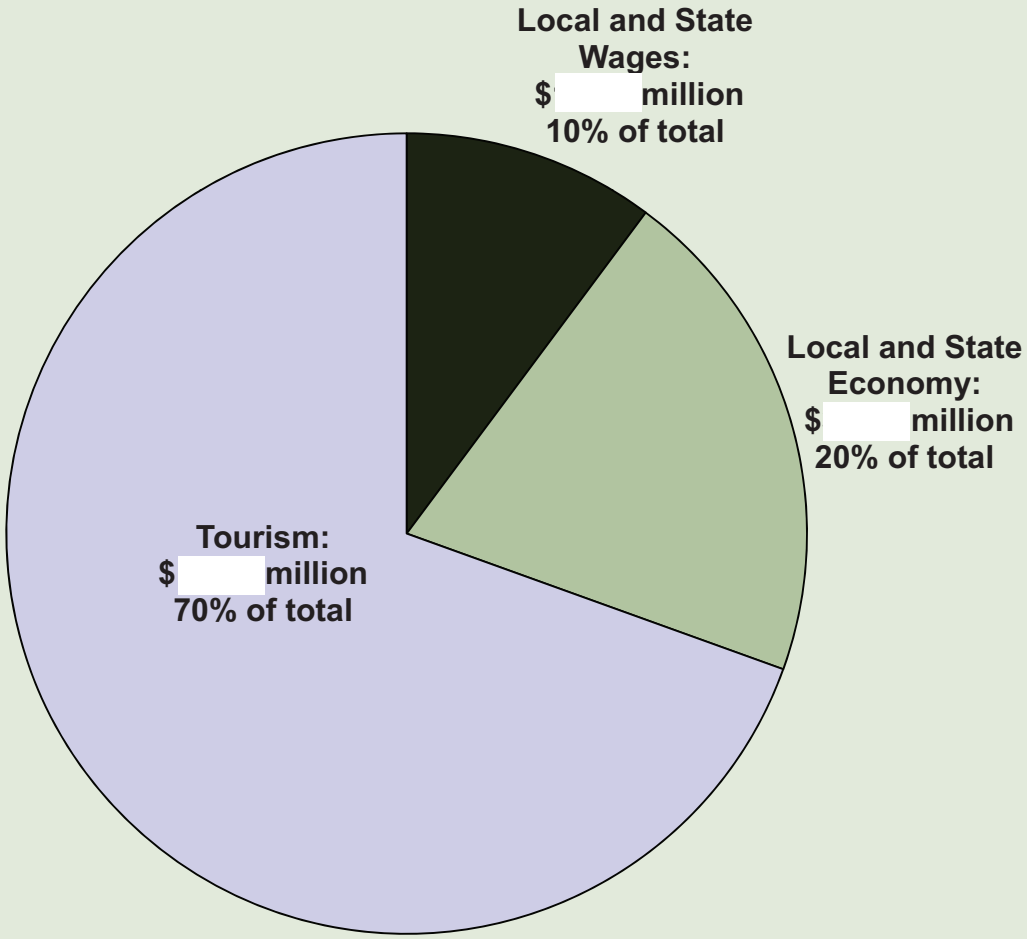
Even if just 50 percent of FACW's tourism assumptions are included, tourism still accounts for over 80 percent of the estimated economic benefits.



Revised FACW Net Economic Benefits: Modified Tourism Assumptions

At FACW's lowest tourism assumption, the impact of tourism is still more than double that of wages and output.

(Low end assumption based on a 0.25 percent increase in local Atlantic City tourism during construction and 0.50 percent increase in local tourism after project completion.)



Revised Net Economic Benefits: Modified Tourism Assumptions

Methodology for Calculating Alternative Tourism Impacts:

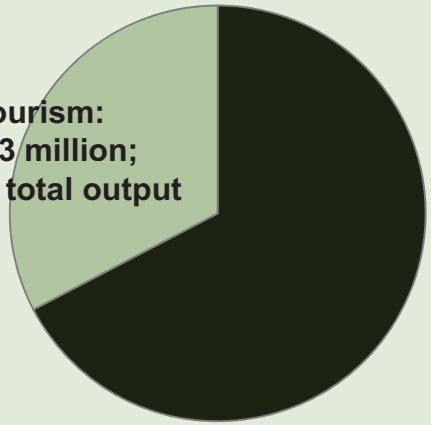
- Data on the number of visitors to Atlantic City each year was gathered from the South Jersey Transportation Authority.
- The median number of nights a visitor stays in Atlantic City is 2 nights, and in this time they spend an average of $823, or about $412 per night. (Atlantic City Convention & Visitor Authority)
- Assume that from 2012 to 2033 the number of visitors would increase by the amount specified by FACW's base assumptions (percent during construction, percent in year 1, percent in year 2, and percent in subsequent years).

- Based on above assumptions, and assuming each visitor is a new visitor, and stays in Atlantic City for two days, total tourism impacts (including tax impacts), totals to a NPV of **$8.36 million**, significantly less than FACW's most conservative estimate of almost **$ billion**.

Revised Net Economic Benefits, Revised Tourism Shares

Even after FACW's tourism impacts have been revised, tourism still represents a significant share of the project's benefits.

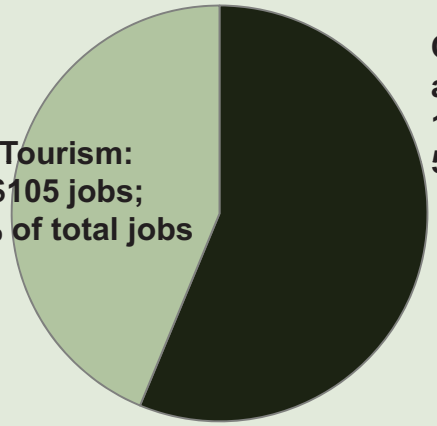
Output



Tourism:
$11.3 million;
33% of total output

Construction and Operation:
$23.3 million;
67% of total output

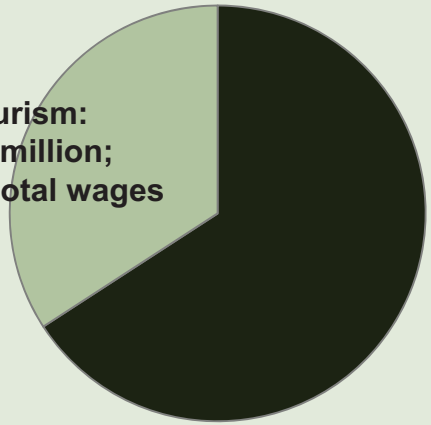
Jobs



Tourism:
$105 jobs;
44% of total jobs

Construction and Operation:
135 jobs;
56% of total jobs

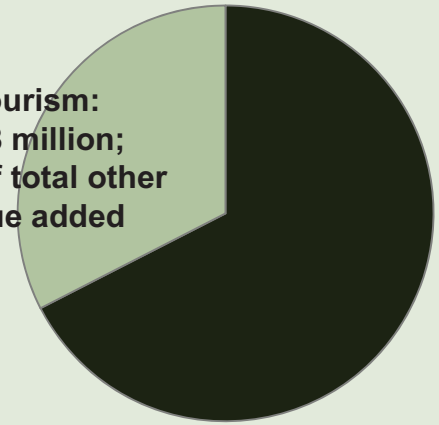
Wages



Tourism:
$4.1 million;
34% of total wages

Construction and Operation:
$7.9 million;
66% of total wages

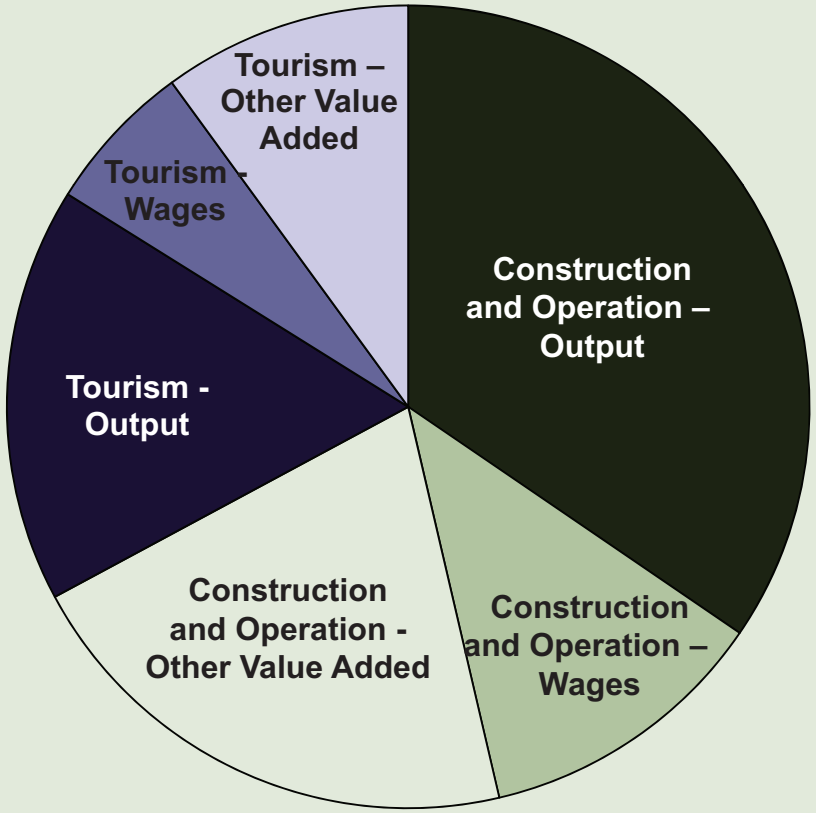
Other Value Added



Tourism:
$6.8 million;
33% of total other value added

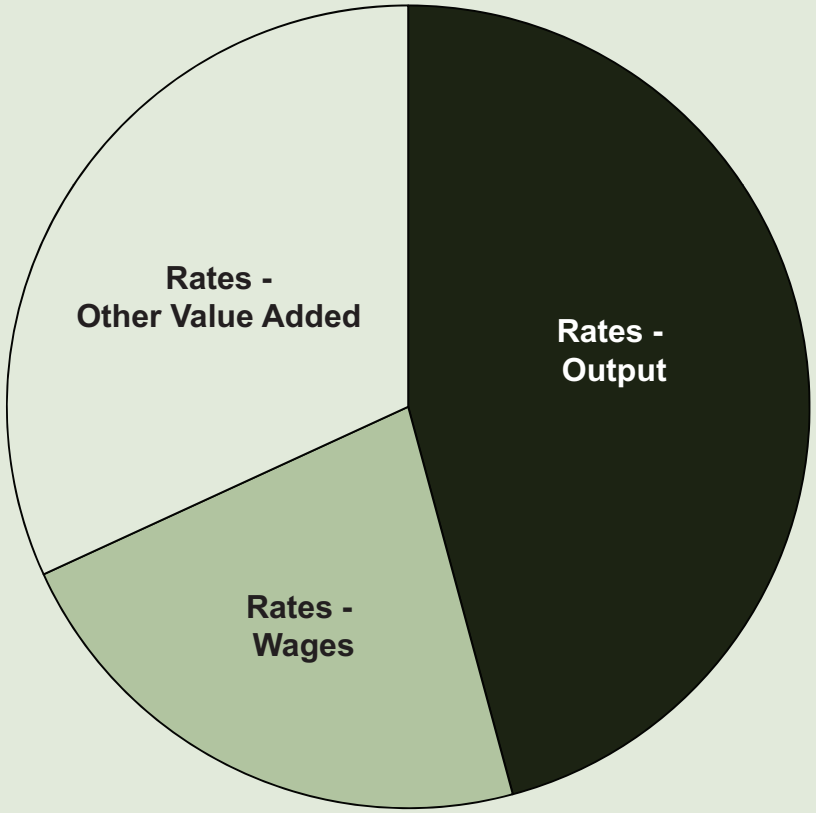
Construction and Operation:
$14.0 million;
67% of total other value added

Revised Net Economic Benefits: Positive Impacts



		Impact (million $)	Percent of Total (%)
Construction and Operation			
Output	$	23.31	35%
Wages	$	7.98	12%
Other Value Added	$	14.04	21%
Total Construction & Operation	**$**	**45.32**	**67%**
Tourism			
Output	$	11.30	17%
Wages	$	4.11	6%
Other Value Added	$	6.77	10%
Total Tourism	**$**	**22.17**	**33%**
Total	**$**	**67.50**	**100%**

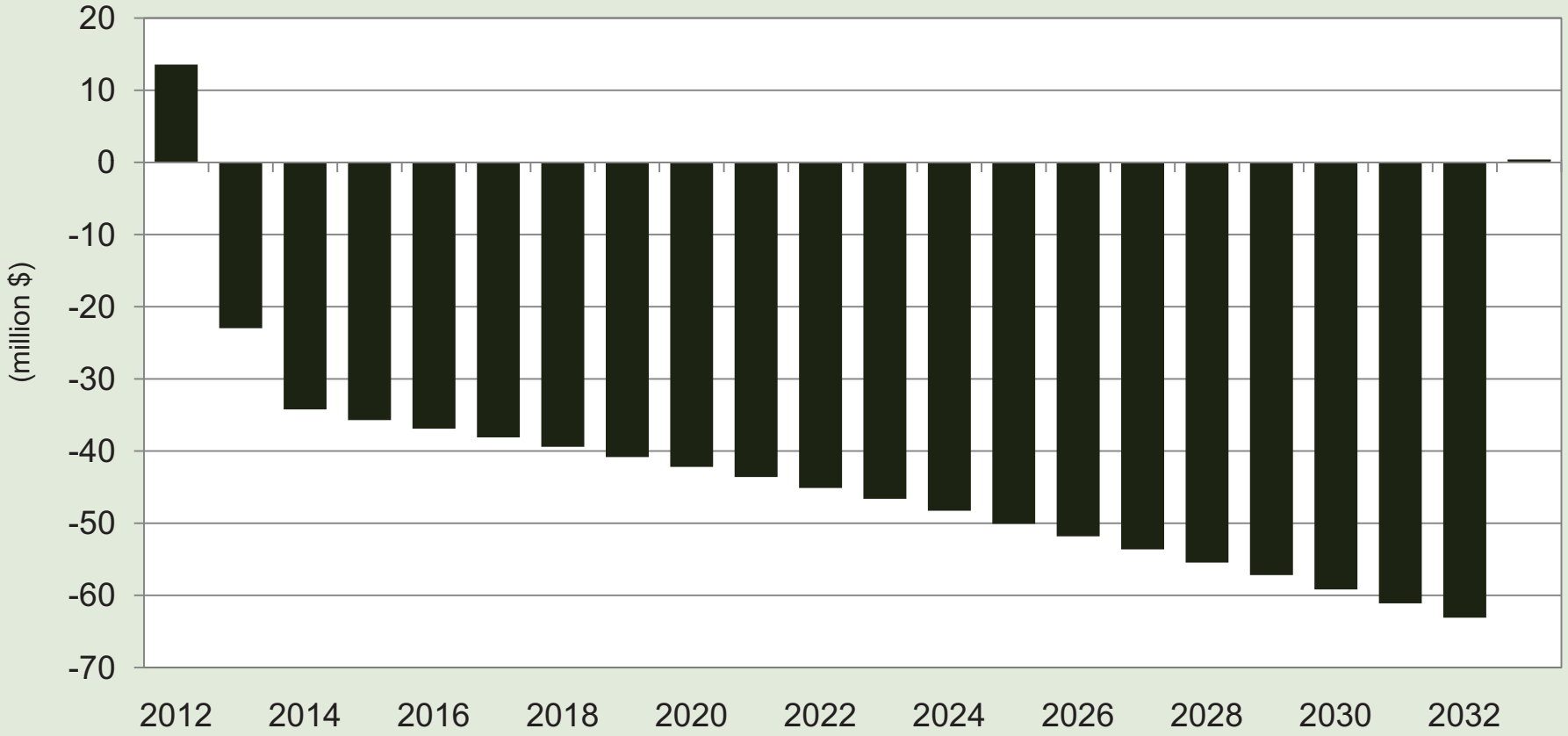
Revised Net Economic Benefits: Negative Impacts



	Impact (million $)	Percent of Total (%)
Rates		
Output	$ (946.10)	46%
Wages	$ (461.44)	22%
Other Value Added	$ (658.01)	32%
Total Rate Impact	**$ (2,065.55)**	**100%**

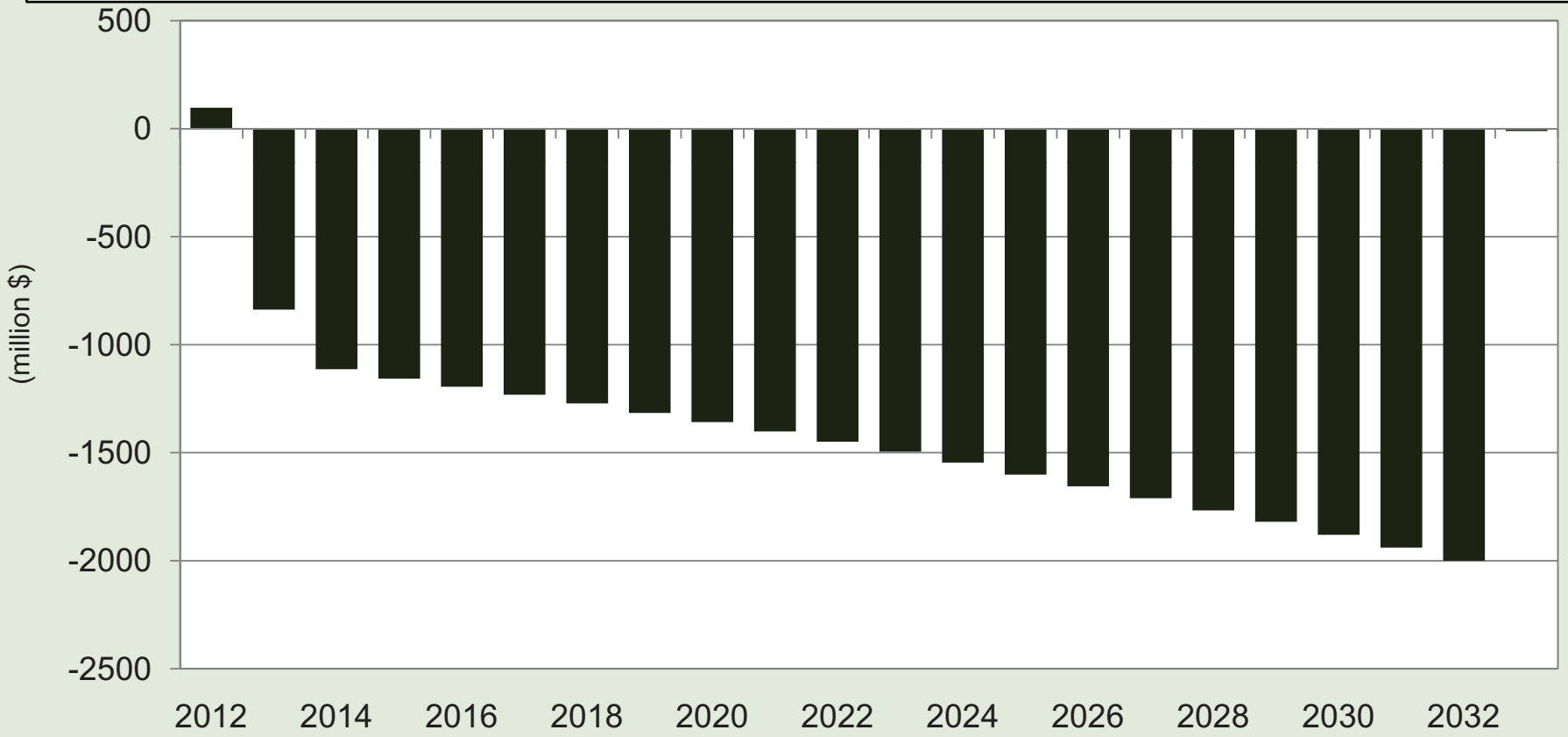
Revised Net Economic Benefits: Total Net Impacts (Output)

Negative rate impacts, plus positive impacts from construction, operation and tourism, result in a net reduction of New Jersey output of $911 million, or $452 million (NPV). The FACW project is estimated to have a negative net economic benefit from an economic output perspective.



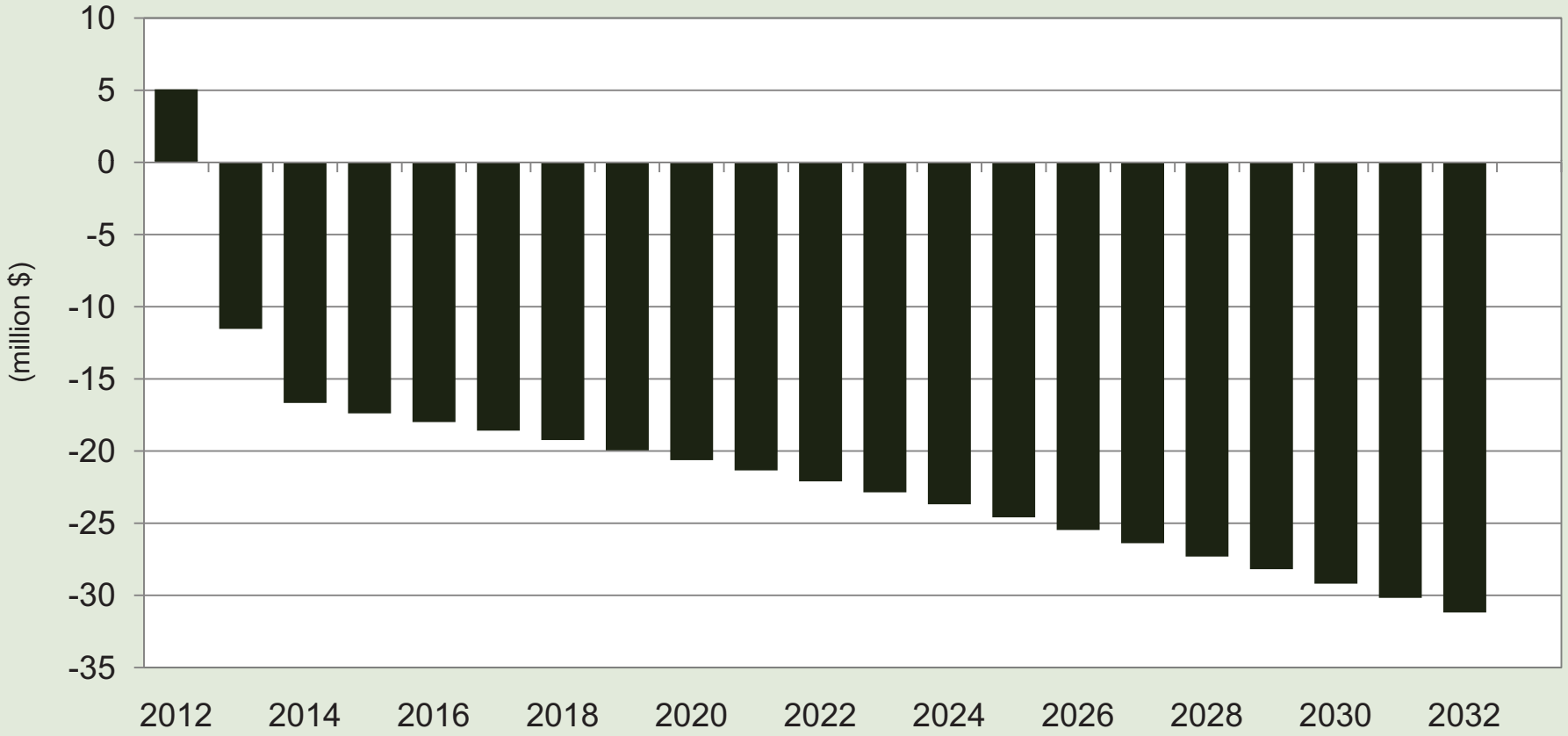
Revised Net Economic Benefits: Total Net Impacts (Employment)

Negative rate impacts, plus positive impacts from construction, operation and tourism, result in a net reduction in total employment of some 29,661 jobs. The FACW project is estimated to have a negative net economic benefit from an employment perspective.



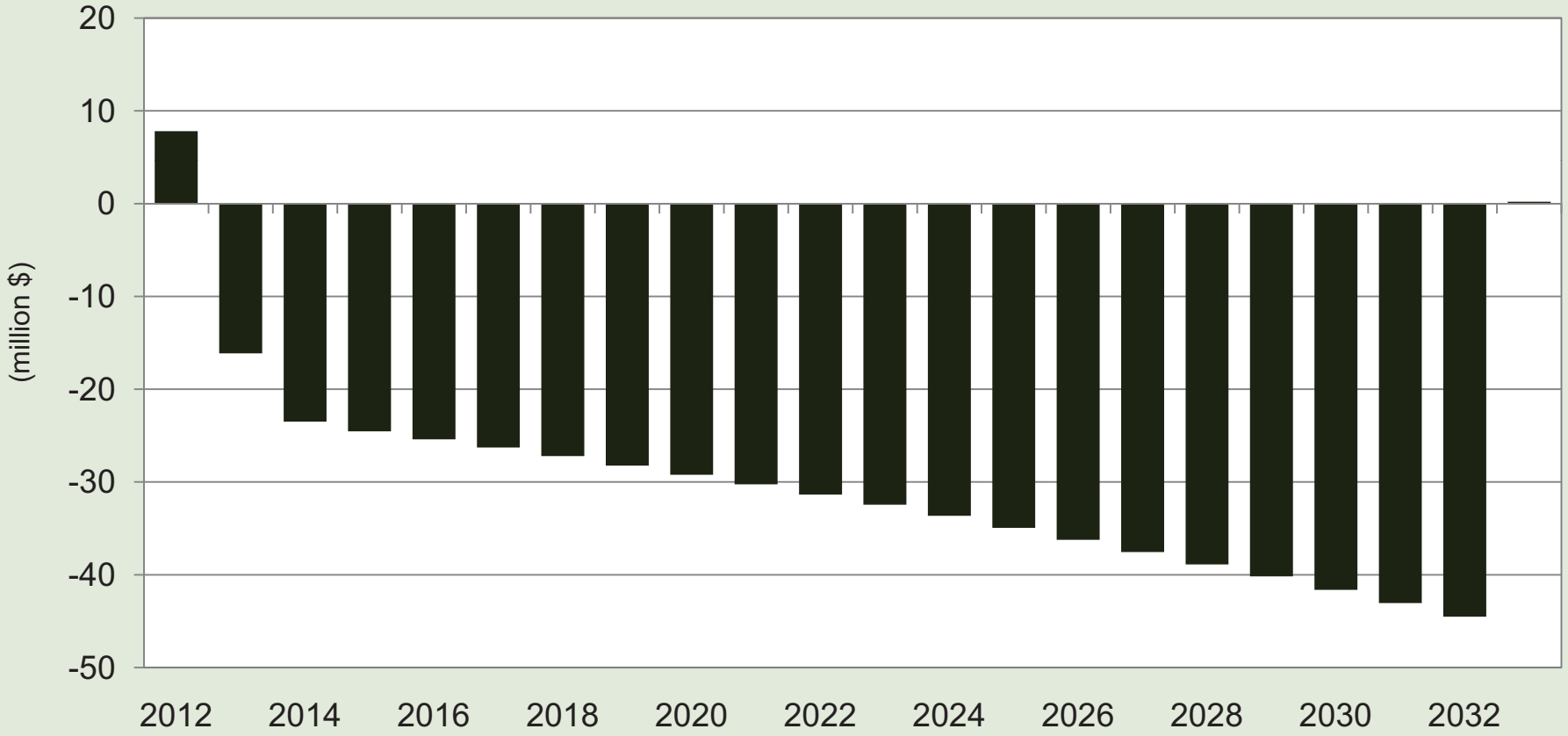
Revised Net Economic Benefits: Total Net Impacts (Wages)

Negative rate impacts, plus positive impacts from construction, operation and tourism, result in a reduction of total wages of $449 million, or $223 million (NPV). The FACW project is estimated to have a negative net economic benefit from a wage and salary perspective.



Revised Net Economic Benefits: Total Net Impacts (Other Value Added)

Negative rate impacts, plus positive impacts from construction, operation and tourism, result in a reduction of total other value added of $637 million, or $316 million (NPV). The FACW project is estimated to have a negative net economic benefit from an other value added perspective.



7. Recommendations

Summary of Recommendations

- FACW project should be rejected because it is not in the public interest and does not meet the statutory requirements of the OSWEDA (N.J.S.A. Section 14:8-6) since the project, and its proposed OREC prices, do not result in a net economic benefit to New Jersey ratepayers. The proposed project will create a negative net economic impact of almost $1.0 billion in NPV terms.
- The FACW project should also be rejected as it fails to meet the nameplate capacity limitation outlined by N.J.S.A. 48:3-87.2.
- The FACW project also leaves open a number of unanswered questions raising further important project uncertainties including:
  - Major financial partner has seen a sudden and unexplained decrease in share prices.
  - Turbine vendor has no experience in the selected turbine technology (direct drive).
  - FACW has not shown that the uncertain direct drive technology is cost effective relative to the more familiar gearbox turbine technology.
  - The per unit development costs are exceptionally out of line with the market for unexplained reasons.

Appendix 1: XEMC News Articles

The following articles are provided in this Appendix:

1. Reuters. 2011. Xiangtan Electric Manufacturing Co., Ltd Announces FY 2010 Dividend Payment Date. June 13, 2011. Accessed at: http://in.reuters.com/finance/stocks/600416.SS/key-developments/article/2336796

2. Finance.sina.com.cn. 2011. Sina investment advice. June 13, 2011. Accessed at: http://money.finance.sina.com.cn/corp/view/vCB_AllMemordDetail.php?stockid=600416

3. Voice of China. 2008. Unlawful disclosure of information Hunan Electric shares the largest shareholder in connection with the competition. December 9, 2008. Accessed at: http://cj.voc.com.cn/article/200812/200812091710557461_2.html

4. Ms. Tan Ye, China Value. 2011. Hunan Electric shares: strong "Dazou". August 24, 2010. Accessed at: http://www.chinavalue.net/Blog/453849.aspx

5. Finance.sina.com.cn. 2011. Xiangtan Electric Co., Ltd. Q1 2011 Report. Accessed at: http://file.finance.sina.com.cn/211.154.219.97:9494/MRGG/CNSESH_STOCK/2011/2011-4/2011-04-28/716216.PDF

6. Xinhua News Agency. 2011. Hunan Electric shares rise attempting to use equity incentive plan profits. July 19, 2011. Accessed at: http://big5.xinhuanet.com/gate/big5/news.xinhuanet.com/finance/2011-07/19/c_121686382.htm

7. Finance.sina.com.cn. 2011. Hunan Electric shares rise attempting to use equity incentive plan profits. July 19, 2011. Accessed at: http://finance.sina.com.cn/stock/s/20110719/083510170215.shtml

8. China.com.cn. 2011. Hunan Electric shares rise attempting to use equity incentive plan profits. July 19, 2011. Accessed at: http://news.china.com.cn/rollnews/2011-07/19/content_9003515.htm

1. Reuters. 2011. Xiangtan Electric Manufacturing Co., Ltd Announces FY 2010 Dividend Payment Date. June 13, 2011. Accessed at: http://in.reuters.com/finance/stocks/600416.SS/key-developments/article/2336796

Xiangtan Electric Manufacturing Co., Ltd Announces FY 2010 Dividend Payment Date

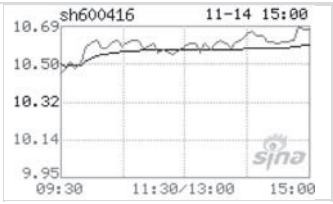
Friday, 3 Jun 2011

Xiangtan Electric Manufacturing Co., Ltd announced that it will use additional paid-in capital to issue 10 new shares for every 10 shares to shareholders of record on June 10, 2011. The Company's shares will be traded ex-right on June 13, 2011.

2. Finance.sina.com.cn. 2011. Sina investment advice. June 13, 2011. Accessed at: http://money.finance.sina.com.cn/corp/view/vCB_AllMemordDetail.php?stockid=600416

Read, please wait

00-00 00:00:00



--.-- 0.00 (0.000%)	Yesterday Close: 0.000	This opening: 0.000	High: 0.000	Low: 0.000
	Turnover: 0	Volume: 0	Bid: 0.000	Selling Price: 0.000
	Price-earnings ratio: 0.000	Yield: 0.000	52-week high: 0.000	52-Week Low: 0.000

Investment advise

(600 416) Hunan Electric shares: the first held in 2011 shareholders meeting

Announcement Date :2011 -11-20 00:00:00

1, consider the "re-appoint the accounting firm on the company's motion";
2, to consider "on the company for the Hunan Xiangtan Electric Manufacturing Co., Ltd. Toyo Electric guarantees the motion."

(600 416) Hunan Electric shares: Other Announcements

Announcement Date :2011 -11-08 00:00:00

(600 416) Hunan Electric shares: Other Announcements
Xiangtan Electric Co., Ltd. of the fourth twenty-fifth meeting of the Board of Directors "on the company's acquisition of U.S. EM's motion", the Board agreed to authorize the project team involved in matters relating to U.S. EM's pre-bid work. November 5, 2011, the company failed to notify the other party received the bid was successful.
This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: About 2011, the first extension of the convening of the EGM Notice

Announcement Date :2011 -11-02 00:00:00

(600 416) Hunan Electric shares: About 2011, the first extension of the convening of the EGM Notice
As the Xiangtan Electric Co., Ltd. also discuss matters related to foreign cooperation, the company board decided to 2011 first extraordinary general meeting date from November 5, 2011 changed to November 20, 2011, conference registration day by the October 31, 2011 9:00-12:00 am, 13:30-17:30 pm changed to 9:00 am on November 18, 13:30-17:30 pm.
This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: on low voltage across the test by the notice

Announcement Date :2011 -10-20 00:00:00

(600 416) Hunan Electric shares: on low voltage across the test by the notice
Recently, independent research and development of Xiangtan Electric Co., Ltd. 2MW direct drive permanent magnet wind turbine by the Chinese Academy of Sciences of the low-voltage electricity through the field test, the data are to meet the State Grid Corporation of enterprise standard "wind farm grid technical requirements." in the low voltage ride through capabilities.
This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: the fourth twenty-fifth Earnings Release Board held in 2011 cum first notice of the EGM

Announcement Date :2011 -10-19 00:00:00

(600 416) Hunan Electric shares: the fourth twenty-fifth Earnings Release Board held in 2011 cum first notice of the EGM
Xiangtan Electric Co., Ltd. of the fourth twenty-fifth meeting of the Board of Directors October 18, 2011 was held meeting adopted the "re-appoint the accounting firm's motion," "about the company reported third quarter of 2011 motion "" on the company for the Hunan Xiangtan Electric Manufacturing Co., Ltd. Toyo Electric guarantees the motion, "and so on.
Company in 2011 11 月 5 日 (Saturday) morning 9 o'clock meeting in 2011 the first provisional shareholders meeting, to consider more than the motion.
This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: Notice on external security

Announcement Date :2011 -10-19 00:00:00

(600 416) Hunan Electric shares: Notice on external security
Xiangtan Electric Co., Ltd. The joint venture company for the Hunan Xiangtan Electric Manufacturing Co., Ltd. Toyo Electric guarantees the amount of $ 10 million.
This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: the first three quarters of 2011 the main financial indicators

Announcement Date :2011 -10-19 00:00:00

(600 416) Hunan Electric shares: the first three quarters of 2011 the main financial indicators
Basic earnings per share (yuan) 0.21
Weighted average return on equity (%) 5.24
Attributable to shareholders of listed companies net assets per share (yuan) 3.81
This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: Twelfth Earnings Release Fourth Board of Supervisors

Announcement Date :2011 -10-19 00:00:00

(600 416) Hunan Electric shares: Twelfth Earnings Release Fourth Board of Supervisors
Xiangtan Electric Co., Ltd. Twelfth Meeting of the Fourth Board of Supervisors on October 18, 2011 meeting, the meeting passed the "about the company reported third quarter of 2011 motion."
This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric Shares: Quarterly to be disclosed

Announcement Date :2011 -10-19 00:00:00

The original disclosure date: 2011-10-18; a change Date: 2011-10-19; a change announcement date: 2011-10-11;

(600 416) Hunan Electric shares: the situation on the announcement of new product development

Announcement Date :2011 -09-29 00:00:00

(600 416) Hunan Electric shares: the situation on the announcement of new product development
Recently, Xiangtan Electric Co., Ltd. The first type of test wind turbines Taipower excitation wind turbine testing center in the country successfully tested, the data meet the design requirements.
This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: 5 MW offshore wind turbine and grid announcement

Announcement Date :2011 -09-15 00:00:00

(600 416) Hunan Electric shares: 5 MW offshore wind turbine and grid announcement
XEMC Co., Ltd. is a wholly owned subsidiary of Xiangtan Electric Co., Ltd., its subsidiary Darwin Hunan Electric Co., Ltd. R & D 5 MW direct-drive permanent magnet wind turbine located in the Dutch province of North Holland National Energy Research Center of the wind turbine test field, has successfully completed commissioning run into power.
This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: on the part of motor short-listed ″energy-saving products projects″ to promote

efficient motor catalog (third) of the Notice

Announcement Date :2011 -09-01 00:00:00

(600 416) Hunan Electric shares: on the part of motor short-listed "energy-saving products projects" to promote efficient motor catalog (third) of the Notice

Xiangtan Electric Co., Ltd. from the National Development and Reform Commission website was informed that the Ministry of Finance, National Development and Reform Commission announced the "energy-saving products Waste Management Project" to promote efficient motor catalog (third). Companies rated power range 355KW ≤ ≤ 25000KW the 1332 models of high-voltage three-phase asynchronous motor third finalist to promote the directory.

This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: a major contract announcement

Announcement Date :2011 -09-01 00:00:00

(600 416) Hunan Electric shares: a major contract announcement

Recently, a subsidiary of Xiangtan Electric Co., Ltd. Hunan Electric Co., Ltd., a wholly owned subsidiary of Wind Power Weiwei Ke Xiang, Inc. (seller) and Ireland Gaelectric Holdings Plc (Gail Power Holding Company) (the buyer) signed a total of six XV90 The contract for the sale of wind turbine machine, the contract amount of about 18 million euros.

This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: Limited on the acquisition of equity XEMC complete change of business registration notice

Announcement Date :2011 -08-26 00:00:00

(600 416) Hunan Electric shares: Limited on the acquisition of equity XEMC complete change of business registration notice

Now Xiangtan Electric Co., Ltd. and XEMC signed the original shareholders' equity transfer agreement "has been completed performance, and has completed XEMC equity for change of business registration, made Xiangtan City Administration for renewal of the" business license. "

This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: 2011 half-year key financial indicators

Announcement Date :2011 -08-22 00:00:00

(600 416) Hunan Electric shares: 2011 half-year key financial indicators
Basic earnings per share (yuan) 0.19
Weighted average return on equity (%) 4.59
Attributable to shareholders of listed companies net assets per share (yuan) 4.18
This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: to raise funds on deposit with the actual use of the special report

Announcement Date :2011 -08-22 00:00:00

(600 416) Hunan Electric shares: to raise funds on deposit with the actual use of the special report

Xiangtan Electric Co., Ltd. will raise funds deposited with the actual use of the special report to be announced.

This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: The Fourth Board of Supervisors XI Earnings Release

Announcement Date :2011 -08-22 00:00:00

(600 416) Hunan Electric shares: The Fourth Board of Supervisors XI Earnings Release

Xiangtan Electric Co., Ltd. The eleventh session of the Fourth Board of Supervisors on August 19, 2011 meeting, the meeting passed the "half-Xiangtan Electric Co., Ltd. 2011 Annual Report and Summary Report", "Xiangtan Electric Co., Ltd. on raising actual use of funds deposited with the special report. "

This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: the twenty-fourth Earnings Release Fourth Board of Directors

Announcement Date :2011 -08-22 00:00:00

(600 416) Hunan Electric shares: the twenty-fourth Earnings Release Fourth Board of Directors

Xiangtan Electric Co., Ltd. Twenty-fourth session of the Fourth Board of Directors August 19, 2011 meeting, the meeting passed the "Xiangtan Electric Co., Ltd. 2011 semi-annual report and semi-annual summary report", "Xiangtan Electric shares Limited to raise funds on deposit and the actual use of the special report. "

This summary is for reference only, to specify the date of full disclosure media announcement shall prevail.

(600 416) Hunan Electric shares: mid-year report to be disclosed

Announcement Date :2011 -08-22 00:00:00

(600 416) Hunan Electric shares: mid-year report to be disclosed

↑ Back to Top ↑

- 投资提醒

(600416) 湘电股份：召开2011年度第1次临时股东大会

公告日期:2011-11-20 00:00:00

1、审议《关于公司续聘会计师事务所的议案》；2、审议《关于公司为湖南湘电东洋电气有限公司提供担保的议案》。

(600416) 湘电股份：其他公告

公告日期:2011-11-08 00:00:00

(600416) 湘电股份：其他公告　　湘潭电机股份有限公司第四届董事会第二十五次会议审议了《关于公司收购美国EM公司的议案》，董事会同意授权项目组参与美

(600416) 湘电股份：关于2011年第一次临时股东大会延期召开的公告

公告日期:2011-11-02 00:00:00

(600416) 湘电股份：关于2011年第一次临时股东大会延期召开的公告　　由于湘潭电机股份有限公司对外合作相关事宜还在洽谈中，公司董事会决定将二0一一年

(600416) 湘电股份：关于通过低电压穿越测试的公告

公告日期:2011-10-20 00:00:00

(600416) 湘电股份：关于通过低电压穿越测试的公告　　近期，湘潭电机股份有限公司自主研发的2MW直驱永磁风力发电机组通过了中国电力科学院的低电压穿越

(600416) 湘电股份：第四届董事会第二十五次会议决议公告暨召开二0一一年第一次临时股东大会的通知

公告日期:2011-10-19 00:00:00

(600416) 湘电股份：第四届董事会第二十五次会议决议公告暨召开二0一一年第一次临时股东大会的通知　　湘潭电机股份有限公司第四届董事会第二十五次会议

(600416) 湘电股份：对外担保事项的公告

公告日期:2011-10-19 00:00:00

(600416) 湘电股份：对外担保事项的公告　　湘潭电机股份有限公司本次为合营公司湖南湘电东洋电气有限公司提供担保额度为1000万元。　　本摘要仅供参考

(600416) 湘电股份：2011年前三季度主要财务指标

公告日期:2011-10-19 00:00:00

(600416) 湘电股份：2011年前三季度主要财务指标 基本每股收益(元)　　0.21加权平均净资产收益率(%)

(600416) 湘电股份：第四届监事会第十二次会议决议公告

公告日期:2011-10-19 00:00:00

(600416) 湘电股份：第四届监事会第十二次会议决议公告　　湘潭电机股份有限公司第四届监事会第十二次会议于2011年10月18日召开，会议审议通过了《关于

(600416) 湘电股份：拟披露季报

公告日期:2011-10-19 00:00:00

原披露日期：2011-10-18；一次变更日期：2011-10-19；一次变更公告日期：2011-10-11；

(600416) 湘电股份：关于新产品研制情况的公告

公告日期:2011-09-29 00:00:00

(600416) 湘电股份：关于新产品研制情况的公告　　近日，湘潭电机股份有限公司首台电励磁风力发电机型试验在国家风力发电机试验中心试验成功，各项数据均

(600416) 湘电股份：5兆瓦海上风力发电机并网发电公告

公告日期:2011-09-15 00:00:00

(600416) 湘电股份：5兆瓦海上风力发电机并网发电公告　　湘电风能有限公司系湘潭电机股份有限公司全资子公司，其控股子公司湘电达尔文有限公司研发的5兆

(600416) 湘电股份：关于部分电机入围“节能产品惠民工程”高效电机推广目录(第三批)的公告

公告日期:2011-09-01 00:00:00

(600416) 湘电股份：关于部分电机入围“节能产品惠民工程”高效电机推广目录(第三批)的公告　　湘潭电机股份有限公司从国家发展和改革委员会网站获悉，财政

(600416) 湘电股份：重大合同公告

公告日期:2011-09-01 00:00:00

(600416) 湘电股份：重大合同公告　　近日，湘潭电机股份有限公司下属子公司湘电风能有限公司之全资子公司湘电维威克公司（卖方）与爱尔兰Gaelectric H

(600416) 湘电股份：关于收购湘电风能有限公司股权完成工商变更登记的公告

公告日期:2011-08-26 00:00:00

(600416) 湘电股份：关于收购湘电风能有限公司股权完成工商变更登记的公告　　现湘潭电机股份有限公司与湘电风能有限公司原股东所签订的《股权转让协议》

(600416) 湘电股份：2011年半年度主要财务指标

公告日期:2011-08-22 00:00:00

(600416) 湘电股份：2011年半年度主要财务指标 基本每股收益(元)　　0.19加权平均净资产收益率(%)

(600416) 湘电股份：募集资金存放与实际使用情况的专项报告

公告日期:2011-08-22 00:00:00

(600416) 湘电股份：募集资金存放与实际使用情况的专项报告　　湘潭电机股份有限公司将募集资金存放与实际使用情况的专项报告予以公告。　　本摘要仅供

(600416) 湘电股份：第四届监事会第十一次会议决议公告

公告日期:2011-08-22 00:00:00

(600416) 湘电股份：第四届监事会第十一次会议决议公告　　湘潭电机股份有限公司第四届监事会第十一次会议于2011年8月19日召开，会议审议通过了《湘潭

(600416) 湘电股份：第四届董事会第二十四次会议决议公告

公告日期:2011-08-22 00:00:00

(600416) 湘电股份：第四届董事会第二十四次会议决议公告　　湘潭电机股份有限公司第四届董事会第二十四次会议于2011年8月19日召开，会议审议通过了《

(600416)湘电股份：拟披露中报

公告日期:2011-08-22 00:00:00

(600416)湘电股份：拟披露中报

3. Voice of China. 2008. Unlawful disclosure of information Hunan Electric shares the largest shareholder in connection with the competition. December 9, 2008. Accessed at: http://cj.voc.com.cn/article/200812/200812091710557461_2.html

Unlawful disclosure of information Hunan Electric shares the largest shareholder in connection with the competition

[Source: 21st Century Business Herald]:2008 -12-09 17:10:55

While the reported "illegal disclosure of information", while the alleged "benefits", Hunan Electric shares are caught in the "big shareholders of trouble." December 4, there are investors sent a copy to the Commission's "report material" refers to the Hunan Electric shares "for illegal disclosure of information" - "without notice and the decision-making, both listed companies, 250 million related to capital significant investment matters, there are controlling shareholders of the same competition. " "are not things." Hunan Electric shares securities on behalf of Li Yiwen, explained to reporters, including news sites, including controlling shareholders, the relevant reports were all "misunderstanding", and does not involve disclosure of information. However, Li Yiwen's reply does not answer the following questions: Why should a listed company when sufficient funds in the money, give up the "super-low quality assets," the acquisition of equity a priority right to hand over major shareholders? Before that, Hunan Electric shares just for this subsidiary, to provide up to $ 500 million bank credit guarantees. "Unlawful disclosure"? Controlling shareholders' intra-industry competition "," illegal disclosure of information "? Hunan Electric shares recently fell into such a challenge being. Hunan Xiangtan Electric Motor Co. shares full name is China's largest wind power equipment manufacturers, the controlling shareholder of Hunan Electric Group Company Limited ("Hunan Electric Group"). November 28, Hunan Electric Group on its Web site, show a "significant investment" information. The News said, "the morning of November 24, Wulanchabu Municipal People's Government, Hunan Electric Wind Energy Co., MW permanent magnet direct drive wind turbine assembly project cooperation signing ceremony in XEMC held on the third floor conference room, Hunan General Manager Zhao Wenhong wind power, the mayor Xuepei Ming Wulanchabu sign the agreement. " According to information, XEMC initial investment of $ 250 million in Chahar Wulanchabu Industrial Park, creating trillion watt permanent magnet direct drive wind turbine assembly projects, mainly produce 2 MW permanent magnet direct drive wind turbine, plans to start construction in April next year, the end of October will be completed within two years the annual output is expected to reach 300, the annual output value $ 4 billion. According to public information, Hunan Electric shares as of 2007, the audited net assets of about 1.1 billion, sales revenue of about 2.7 billion, a subsidiary of the holding of new projects, was a "significant investment matters." However, searching the announcement Hunan Electric shares, both could not find related information disclosure, the Board has not convened, the shareholders' meeting this resolution. In fact, the disclosure of such information "missing" is not the first time.

April 21, 2008, "Jiuquan Daily", and News reports indicate the site, Hunan Electric Group, XEMC "settled Gansu Jiuquan wind power equipment manufacturing industrial park", Hunan and Sichuan Electric Group Kerry Group co-production of 300 East sets of 2.0 MW permanent magnet direct drive wind turbine assembly projects. These two issues, Hunan Electric shares and there is no related announcement, the disclosure of information or explanation. "After a project is related to major shareholders of listed companies 'competition with the industry'? Previous item, whether the controlling shareholders 'unlawful disclosure of information'?" Report material, Hunan Electric shares to investors compass (a pseudonym) asked this question to. Contrary to expectations of the compass, Li Yiwen completely denied the accusations. "This is not something I see reports, we also Paoqu Wen chairman." Li Yiwen, said the reporter, the Hunan Electric Group and media reports related to the investment, do not exist. Li Yiwen further explained that the Hunan Electric Group to disclose investment information is relevant work is not well thought out, "according to regulations, should go through our approval, notice, in order to do reports." In fact, this interpretation is undoubtedly the "default" the Group "disclosure" of the violation. Time of this writing, the reporter again click on the link above report, has been found to fully deleted. "Benefits"? For investors, the "unlawful disclosure" effect is a small matter; if the "benefits", is the real loss. XEMC Limited (the "XEMC") is a subsidiary of Hunan Electric shares, the registered capital of 310 million yuan, Hunan Electric shares 51%. In addition, Japan Co., Ltd. Hong original production (referred to as the "original Hong production") holding 27%, Hunan Electric Group holding 22%. XEMC of Hunan Electric shares of the most important one of two operating subsidiaries. According to the announcement shows that since its inception in 2006, Hunan Electric wind turbine industry, machine production, technical research, market development and other work progress has been made. However, this is the "quality assets", in the face of "super cheap" shares of the transferee unit, Hunan Electric shares, but hand over, "cheap" the controlling shareholder. November 8, Hunan Electric shares notice that the global financial turmoil, Hong original production currently experiencing a large main business problems, business situation is grim, face enormous financial pressure. Given this situation, the former agreed to sell its products in Hong XEMC 27% stake. Because the Hunan Electric shares as XEMC major shareholder of the shares entitled to "priority acquisition rights." To September 30 as the base date, by asset valuation, XEMC total assets of 1.05 billion yuan, net assets of 420 million yuan. Easy to calculate, it is a very good deal, the original Hong output corresponding to the net assets of 113.4 million yuan shares, while the selling price of only 83.7 million yuan. However, the Hunan Electric shares, but said, "As the production and management company requires a lot of money, considering the current financial situation, the 27% stake in the company to abandon the acquisition of right of priority, agreed to be acquired by the Hunan Electric Group." Therefore, "Hunan Electric Group to assess the fair value of 1 yuan / share price, all in cash to the transferee of the original Hong output 27% of the shares." Completion of the acquisition, Hunan Electric Group shareholding increased to 49%, Hunan Electric shares 51%. Hunan Electric shares of the "financial situation" really so bad, you need to give your fingertips a "bargain-hunting opportunities" it? The three quarterly, Hunan Electric shares capital 777 million yuan currency, even minus 83.7 million yuan, still well above

the "beginning of the year" 469 million yuan. And in August, Hunan Electric shares also XEMC provides $ 500 million bank credit guarantees, and various other practices of listed companies, Hunan Electric Group is not for the XEMC this joint-venture subsidiary, provides the corresponding equity "security." In this regard, Li Yiwen, said Hunan Electric shares gearing ratio exceeding 70%, inability to acquire the shares.In fact, the reporter access to the other three A-share listed companies, wind power equipment manufacturing assets-liability ratio, respectively, Xinmao Technology 72%, 64% of Huayi Electric, Dongfang Electric 97%, Hunan Electric shares and the debt ratio does not exceed the industry average. More to the point, holding 700 million yuan currency funds Hunan Electric shares, does not need a mere 8,000 million of investment, improve asset-liability ratio. End of the interview, "'money funds' may not be able to use." Li Yiwen just explained.

非法披露信息 湘电股份大股东涉嫌同业竞争

[来源:21世纪经济报道]时间：2008-12-09 17:10:55

一边被举报“非法信息披露”，一边涉嫌“利益输送”，湘电股份正身陷“大股东带来的烦恼”。

12月4日，有投资者发来一份给证监会的“举报材料”，指湘电股份“涉嫌非法信息披露”——“未经公告与有关决策的，既有上市公司涉资2.5亿的重大投资事项，又有控股股东的同业竞争。”

“都是没有的事。”湘电股份证券事务代表李怡文向记者解释，包括控股股东网站新闻在内、相关报道均系“误会”，并不涉及信息披露问题。

然而，李怡文的答复并不能回答以下问题：为何上市公司要在货币资金充足之时，放弃“超低价优质资产”股权的优先收购权，将其拱手相让大股东？而在此之前，湘电股份刚刚为这家子公司，提供高达5亿元的银行授信担保。

“非法信息披露”？

控股股东“同业竞争”、 “非法信息披露”？湘电股份最近陷入了这样的质疑之中。

湘电股份全称湘潭电机股份有限公司，是中国最大的风电设备制造商之一，控股股东为湘电集团有限公司(简称“湘电集团”)。

11月28日，湘电集团在其网站上，显示了一条“重大投资项目”信息。该新闻称，“11月24日上午，乌兰察布市人民政府、湘电风能有限公司兆瓦级永磁直驱风电机组总装项目合作签约仪式在湘电风能三楼会议室举行，湘电风能总经理赵文鸿、乌兰察布市市长薛培明在协议书上签字。”

根据相关信息，湘电风能首期投资2.5亿元，在乌兰察布市察哈尔工业园区内、创建兆瓦级永磁直驱风电机组总装项目，主要生产2兆瓦永磁直驱风力发电机组，计划明年4月份开工建设，10月底竣工投产，两年内预计年产量可达300台，实现年产值40亿元。

根据公开资料，湘电股份截至2007年经审计的净资产约11亿，销售收入约27亿，上述控股子公司的新项目，明显属于“重大投资事项”。

然而，遍寻湘电股份的公告，既找不着相关信息的披露，亦没有召开过董事会、股东大会对此进行决议。

事实上，这样的信息披露“缺少”已不是第一次。

4. Ms. Tan Ye, China Value. 2011. Hunan Electric shares: strong “Dazou”. August 24, 2010. Accessed at: http://www.chinavalue.net/Blog/453849.aspx

Hunan Electric shares: strong "Daozu"

Ye Tan original | 2010-08-24 14:00 | Favorites | vote
Keywords: strength of the Hunan Electric Daozu

For ordinary investors, Hunan Electric shares in listed companies in China can be described as the very strength of Daozu from the texture, the Xiangtan Electric Co., Ltd. (Hunan Electric shares, 600,416) is a promising family of companies. The company is China's four major motor manufacturing plant, the only auxiliary enterprises, the State Development and Reform Commission designated equipment at home base, the top three in the medium-sized motor industry, market share of about 13%. Whether it is civil, military, or infrastructure, new energy, Hunan Electric shares can catch a ride. Not only that, Hunan Electric shares have better capital fund and cash flow. This promising companies did not allow investors to enjoy the joy of growth, there is a clear to the company's largest shareholder of Hunan Electric Group Co., Ltd. (holding 38.63%) traces of transportation interests, listed companies and the interests of ordinary investors are been denied, no matter how good the company growth, but behind closed doors internal entertain themselves with little to investors.
June 8, Hunan Electric shares resume trading after the close limit: June 5, the company's private placement program as market expectations, the market had expected a strong majority shareholder of wind power assets are not injected into the listed company, replaced by a fund-raising 1 billion million. Stock price declines and May 18 there is a certain relationship between the ex-dividend, the most important reason is the company's big appetite for additional financing, but too mean to inject quality assets, institutional investors, five have four options to vote with their feet, the massive stock sell-off. Shares of Hunan Electric transfer to the interests of major shareholders has long been questioned. In December 2008, investors have to report to the Commission, Hunan Electric shares "for illegal disclosure of information", "without notice and the decision-making, both listed companies involved in major capital investment of 250 million items, but also the controlling shareholder intra-industry competition. " The company did not disclose November 24, 2008 at Wulanchabu initial investment of up to 250 million wind turbine project, also did not disclose the Hunan Electric Group in April 1997, XEMC "settled Gansu Jiuquan wind power equipment manufacturing Industrial Park ", east Sichuan, Hunan Electric Group and Kerry Group co-production of 300 sets of 2.0 MW permanent magnet direct drive wind turbine assembly projects. Is even more ridiculous, Hunan Electric Group net assets per share is lower than the price of the original transferee Japan Co., Ltd. Hunan Electric shares held by Hong important production subsidiary XEMC 27% of the shares: the transferee the amount of 83.7 million; Hunan Electric net assets of 420 million wind energy, multiplied by 27% is 113.4 million. November 8, 2008, Gordon announced that shares power to spare (to give priority to the acquisition of rights) is that "given the current financial situation."
Some investors pointed out that this is untrue, the Hunan Electric shares of financial status, are fully capable of high-quality low-cost subsidiary to purchase the core assets: According to public information, as of 2007, Hunan Electric shares audited net assets about 11 million, sales income of about 2.7 billion; 2008, main business income of 3.34 billion, net profit of about 58.8 million, with the ability to buy major assets. Power not to Tixiang equity shares XEMC before the sale, as this subsidiary provides up to 500 million bank credit. Hunan Electric shares, but is generous investor's money, nothing to show good controlling shareholder. May 30, 2009, Hunan Electric Group in the company's Web site proudly surface features: XEMC received CIC International Co., Ltd. 2 copies of the tender bid notice, bid a total of approximately 300,000 kwh of wind power concession projects, the successful tenderer amount of nearly 1.6 billion, the next three years, XEMC annual revenue growth rate will reach 80%. It would appear that future XEMC good - because a large XEMC Hunan Electric shares are shares

"ceded" to the controlling shareholder, Hunan Electric shares of common investors naturally huge gains with this corresponding missed out. In the "Board" column in the magazine, the author's previous analysis of the ST against the interests of investors, listed companies or hollowed out, or the size of the controlling shareholder fight. But the case by Hunan Electric shares, we see how the strength of the company's transfer of benefits, competition, how to share control of the listed companies into the parent company of transfusion pipe, the alienation of ordinary investors into pure cash cow. "Face on fishing Qiao Jiang example, used to look at moon spring. Pot liquor Happy Encounter. How many things ancient and modern, have to pay jokes" - China's capital market this "artificial Daozu I fish" of the matter, if not to go into the relevant departments, will be the healthy development of capital markets in numerous "Daozu" proud of laughter, become a joke.

湘电股份：有实力的“刀俎”

叶檀 原创 | 2010-08-24 14:00 | 收藏 | 投票
关键字：实力 湘电 刀俎

对普通投资者而言，湘电股份可谓中国上市公司中颇具实力的刀俎

从质地上来说，湘潭电机股份有限公司（湘电股份，600416）是家有希望的公司。该公司是我国四大电机厂中唯一的辅机制造企业，是国家发改委指定的设备国产化基地之一，在大中型电机行业排名前三，市场占有率保持在13%左右。无论是民用、军工，还是基建、新能源，湘电股份都能搭上顺风车。不仅如此，湘电股份还有较好的资本公积金和现金流。

这家大有希望的企业却没有让投资者享受到成长的快乐，公司存在明显的向大股东湘电集团有限公司（持股38.63%）输送利益的痕迹，上市公司与普通投资者的利益均遭到剥夺，公司成长性再好，不过是内部人关起门来自娱自乐，与投资者关系不大。

6月8日，湘电股份复牌后接近跌停：公司6月5日的定向增发方案不如市场预期，此前市场预期强烈的大股东风电资产并未注入到上市公司，取而代之的是筹资10亿元。股价大跌与5月18日的分红除权有一定关系，最重要的原因是公司大胃口增发融资却吝于注入优质资产，机构投资者5家有4家选择用脚投票，大举抛售该公司股票。

对湘电股份向大股东输送利益的质疑早已有之。2008年12月，有投资者向证监会举报，湘电股份“涉嫌非法信息披露”，“未经公告与有关决策的，既有上市公司涉资2.5亿的重大投资事项，又有控股股东的同业竞争”。该公司未披露2008年11月24日在乌兰察布市首期投资高达2.5亿的风电机组项目，同样没有披露同年4月湘电集团、湘电风能“入驻甘肃酒泉风电装备制造产业园”，湘电集团与四川东嘉集团合作生产300套2.0兆瓦永磁直驱式风机组装项目。

更离谱的是，湘电集团以低于每股净资产的价格，受让日本株式会社原弘产所持湘电股份重要子公司湘电风能27%的股份：受让金额为8370 万；湘电风能净资产为42000万，乘以27%是11340万。2008年11月8日，湘电股份发布公告表示忍痛割爱（放弃优先收购权）是因为“考虑到目前资金状况”。

有投资者指出这是不实之辞，以湘电股份的资金状况，完全有能力在低价时购买子公司的优质核心资产：根据公开资料，截至2007年，湘电股份经审计的净资产约11亿，销售收入约27亿；2008年主营业务收入33.4亿，净利润约5880万，具备购买重大资产的能力。更不必提湘电股份在湘电风能股权出售之前，为这家子公司提供了高达5亿的银行授信。湘电股份不过是慷投资者之慨，向控股股东示好罢了。

2009年5月30日，湘电集团在公司网站上得意洋洋地表功：湘电风能收到中投国际投标有限责任公司2份中标通知书，共中标约30万千瓦时风电特许权项目，中标金额近16亿，未来三年，湘电风能营业收入年均增速将达到80%。这样看来，湘电风能前途大好——由于湘电风能相当大的股份被湘电股份“割让”给了控股股东，湘电股份的普通投资者自然便与这相应的巨大收益无缘了。

在《董事会》杂志的本专栏中，笔者以往分析的ST公司侵害投资者利益，或者掏空上市公司，或者大小股东争夺控股权。但通过湘电股份的案例，我们看到有实力的公司如何通过利益输送、同业竞争，如何通过股权控制，将上市公司变成母公司的输血管道，将普通投资者异化成纯粹的现金奶牛。

“白发渔樵江渚上，惯看秋月春风。一壶浊酒喜相逢。古今多少事，都付笑谈中”——对中国的资本市场这种“人为刀俎我为鱼肉”之事，如果相关部门不进行深究，资本市场的健康发展便会在无数“刀俎”得意的笑声中，沦为笑话。

5. Finance.sina.com.cn. 2011. Xiangtan Electric Co., Ltd. Q1 2011 Report. Accessed at: http://file.finance.sina.com.cn/211.154.219.97:9494/MRGG/CNSESH_STOCK/2011/2011-4/2011-04-28/716216.PDF

Xiangtan Electric Co., Ltd.

600 416

Q1 2011 Report

Catalog

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§ 1 Important

1.1 The Board of Supervisors and its directors, supervisors and senior management to ensure that the information contained in this report that there are no False records, misleading statements or material omissions, and the truthfulness, accuracy and completeness of individual and even With responsibility.

1.2 All directors attended the Board meeting.

1.3 The first quarterly financial report is unaudited.

1.4 company for Zhou Jianxiong, in charge of accounting and accounting bodies responsible person Liuhai Qiang people (accounting manager) side Fang statement: to ensure that financial reports in this quarterly report is true and complete.

§ **2** the basic situation of the company

2.1 Major accounting data and financial indicators

Currency: RMB

	The reporting period	The end of last year	The previous reporting period Change the end of the year (%)
Total assets (RMB)	11,129,707,354.00	10,398,356,956.00	7.03
Owner's equity (or interest) (million)	2,464,030,850.00	2,422,440,433.00	1.72
Attributable to shareholders of listed companies net assets per share (yuan / Shares)	8.10	10.31	-21.44

	Year to the end	Period last year (%)
Cash flow from operating activities Net (RMB)	-562,395,301.00	-107.07
Per share, cash flow from operating activities Net (RMB / Shares)	-1.85	-59.35

	The reporting period	Year to the period End	The reporting period the previous year Year (%)
Net profit attributable to shareholders of the Company	37,630,212.00	37,630,212.00	28.40
Basic earnings per share (yuan / share)	0.12	0.12	9.09
Excluding non-recurring items of basic earnings per share (yuan / Shares)	0.11	0.11	Not applicable
Diluted earnings per share (yuan / share)	0.12	0.12	9.09
Weighted average return on equity (%)	1.54	1.54	0.68 percent reduction Point
After deducting non-recurring gains and losses weighted average closing net assets Interest rate (%)	1.36	1.36	0.85 percent reduction Point

Excluding non-recurring items and amounts:

Unit: Currency: RMB

Project	Amount
Loss of non-current assets disposed of	7,872,294
Through profit or loss of government subsidies (and closely related to their business, according to the national system A standard fixed rate or amount of government grants excluded)	724,000

In addition to the above other than the operating income and expenses	-1,602
Effect of income tax	-2,085,357
Minority interest (after tax)	-2,084,909
Total	4,424,426

2.2 The total number of shareholders and top ten holders of shares of the table

Unit: shares

Number of shareholders (households)		26,561
Top ten tradable shareholders shareholdings		
Shareholders (full name)	Held at the end of tradable shares Quantity	Species
Hunan Electric Group Co., Ltd.	105,173,693	ordinary shares of RMB
Commercial Bank of China - Lion Stock Fund	8,060,773	ordinary shares of RMB
Commercial Bank of China - Guangzhou Jufeng Stock Investment Investment Fund	7,500,000	ordinary shares of RMB
Shanghai Pudong Development Bank - GF small cap growth stocks Securities Investment Fund	7,049,531	ordinary shares of RMB
Digital Investment Co., Ltd. Shanghai Galaxy	6,649,900	ordinary shares of RMB
Hai Tong - Bank of China-FORTIS BANK SA / NV	5,813,709	ordinary shares of RMB
Agricultural Bank of China - Yimin innovative edge hybrid card Securities Investment Fund	5,733,140	ordinary shares of RMB
Yinfeng Securities Investment Fund	5,016,568	ordinary shares of RMB
Agricultural Bank of China - Prudential Sijihong hybrid securities Investment funds	4,367,372	ordinary shares of RMB
China Construction Bank Corporation - GF domestic demand Growth of flexible configuration mixing Securities Investment Fund	2,979,980	ordinary shares of RMB

§ **3** Important

3.1 The main financial statements and financial indicators and the reasons for significant changes

□ applicable √ not applicable

3.2 Significant events and their impact and solutions analysis shows

□ applicable √ not applicable

3.3 Company, its shareholders and fulfillment of commitments

□ applicable √ not applicable

3.4 to predict the beginning of the next reporting period or cumulative net loss occurred significantly compared with the previous year Changes and the reasons

□ applicable √ not applicable

Xiangtan Electric Co., Ltd.

Legal representative: Zhou Jianxiong

April 28, 2011

§ **4** Appendix

4.1

Consolidated Balance Sheet

March 31, 2011

Prepared by: Xiangtan Electric Co., Ltd.

Unit: Yuan Currency: RMB audit Type: Unaudited

Project	End of period	Beginning of year
Current assets:		
Currency funds	2,167,978,772	2,481,488,957

Notes receivable	286,058,400	247,614,290
Accounts receivable	4,252,768,131	3,631,319,407
Prepayments	359,996,994	194,925,772
Interest receivable		2,481,502
Other receivables	117,743,124	106,311,147
Financial assets purchased under resale		
Stock	1,805,166,266	1,581,477,726
Due within one year of non-current assets	5,980,000	5,980,000
Other current assets		
Total current assets	8,995,691,687	8,251,598,801
Non-current assets:		
Long-term equity investments	149,081,627	147,808,536
Investment Property		
Fixed assets	1,308,947,197	1,320,246,910
Construction in progress	240,412,721	220,881,547
Intangible assets	151,550,052	172,869,044
Development expenditure	214,237,824	215,383,450
Goodwill	634,503	634,503
Long-term prepaid expenses		
Deferred income tax assets	69,151,743	68,934,165
Other non-current assets		
Total non-current assets	2,134,015,667	2,146,758,155
Total assets	11,129,707,354	10,398,356,956
Current liabilities:		
Short-term borrowings	1,621,502,684	1,498,469,780
Notes payable	1,583,254,630	1,467,787,961
Accounts Payable	3,197,719,217	2,823,817,296
Receipts in advance	380,164,488	326,999,582
Sold under agreements to repurchase		
Fees and commissions		
Accrued payroll	43,154,970	52,338,957
Tax payable	143,727,778	185,118,634

Other payables	202,841,513	151,988,774
Due within one year of non-current liabilities	155,810,354	220,810,354
Other current liabilities		
Total Current Liabilities	7,328,175,634	6,727,331,338
Non-current liabilities:		
Long-term borrowings	480,000,000	410,000,000
Special payables	12,500,000	12,500,000
Accrued liabilities	146,726,819	144,669,323
Deferred income tax liabilities	7,706,123	7,706,123
Other non-current liabilities	68,827,435	65,094,194
Total non-current liabilities	715,760,377	639,969,640
Liabilities	8,043,936,011	7,367,300,978
Owner's equity (or shareholders' equity):		
Paid-in capital (or equity)	304,242,271	304,242,271
Capital surplus	1,562,183,978	1,562,138,364

General risk	105,243,344	105,243,344
Undistributed profit	494,293,593	456,663,381
Currency translation differences	-1,932,336	-5,846,927
Total equity attributable to parent company	2,464,030,850	2,422,440,433
Minority interests	621,740,493	608,615,545
Total shareholders' equity	3,085,771,343	3,031,055,978
Total liabilities and equity	11,129,707,354	10,398,356,956

Legal representative: Zhou JianxiongChief Financial Officer: Liu Haiqiang Accounting Department: Fang Fang

The parent company balance sheet

March 31, 2011

Prepared by: Xiangtan Electric Co., Ltd.

Unit: Yuan Currency: RMB audit Type: Unaudited

Project	End of period	Beginning of year
Current assets:		
Currency funds	1,628,778,636	1,462,021,505
Notes receivable	285,038,450	241,272,944
Accounts receivable	1,455,047,502	1,085,172,366
Prepayments	64,363,256	64,052,581
Interest receivable		2,481,502
Other receivables	72,105,647	81,959,823
Stock	746,307,416	730,905,792
Total Current Assets	4,251,640,907	3,667,866,513
Non-current assets:		
Long-term equity investments	687,492,576	675,301,592
Investment Property		
Fixed assets	825,643,468	834,507,496
Construction in progress	139,736,678	125,698,036
Intangible assets	3,791,693	4,085,035
Deferred income tax assets	19,457,202	19,239,624

Other non-current assets		
Total non-current assets	1,676,121,617	1,658,831,783
Total assets	5,927,762,524	5,326,698,296
Current liabilities:		
Short-term borrowings	898,564,000	265
Trading financial liabilities		
Notes payable	949,096,195	905,762,551
Accounts Payable	844,439,833	980,482,826
Receipts in advance	215,578,154	207,008,725
Accrued payroll	21,620,669	29,426,126
Tax payable	77,935,157	52,345,950
Other payables	49,752,195	42,102,068
Due within one year of non-current liabilities	80,000,000	145,000,000
Other current liabilities		
Total Current Liabilities	3,136,986,203	2,627,128,246
Non-current liabilities:		
Long-term borrowings	450,000,000	410,000,000
Accrued liabilities	6,542,912	7,064,844
Deferred income tax liabilities		
Other non-current liabilities	40,360,106	41,005,106
Total non-current liabilities	496,903,018	458,069,950

Liabilities	3,633,889,221	3,085,198,196
Owner's equity (or shareholders' equity):		
Paid-in capital (or equity)	304,242,271	304,242,271
Capital surplus	1,516,349,418	1,516,349,418
Less: treasury stock		
Special reserves		
Reserve	105,243,344	105,243,344
General risk	368,038,270	315,665,067
Undistributed profit		
Owner's equity (or shareholders' equity)	2,293,873,303	2,241,500,100
Liabilities and owner's equity (or equity) Total	5,927,762,524	5,326,698,296

Legal representative: Zhou Jianxiong Chief Financial Officer: Liu Haiqiang Accounting Department: Fang Fang

Consolidated Income Statement

January-March 2011

Prepared by: Xiangtan Electric Co., Ltd.

Unit: Yuan Currency: RMB audit Type: Unaudited

Project	Amount	Previous period
I. Total Revenue	1,241,296,933	938,551,972
Of which: Operating income	1,241,296,933	938,551,972
Interest		
Premiums earned		
Fee and commission income		
Second, the total cost of business	1,203,429,412	901,503,827
: Cost of operations	1,018,412,857	738,437,405
Business tax and surcharges	3,813,176	5,708,557
Cost of sales	57,535,217	58,034,039
Management costs	81,276,960	81,052,290
Finance costs	40,940,680	14,438,728
Impairment losses	1,450,522	3,832,808
Add: Fair value gains (losses to "-" means Column)		
Investment income (loss "-" for loss)	43,089	148,333
Of which: investments in associates and joint ventures Income	43,089	148,333
Exchange gains (losses to "-" for loss)		
Third, the operating profit ("-" for loss)	37,910,610	37,196,478
Add: operating income	8,718,806	573,565
Less: operating expenses	124,114	448,145
Of which: Losses on disposal of non current assets		78,205
Fourth, the total profit (loss is represented by "-" for loss)	46,505,302	37,321,898
Less: Income tax expense	9,411,219	9,713,453
Fifth, net profit (net loss "-" for loss)	37,094,083	27,608,445
Net profit attributable to equity holders	37,630,212	29,307,007
Minority shareholders	-536,129	-1,698,562

Attributable to shareholders	-536,129	-1,698,562
Earnings per share:		
(A) Basic earnings per share	0.12	0.11
(Ii) Diluted earnings per share	0.12	0.11
Seven other comprehensive income	17,085,154	-8,653,248
Total comprehensive income for the year	54,179,237	18,955,197
Attributable to equity holders of the consolidated total income	41,590,417	24,893,850
Attributable to minority shareholders of consolidated total income	12,588,820	-5,938,653

Legal representative: Zhou Jianxiong Chief Financial Officer: Liu Haiqiang Accounting Department: Fang Fang

Parent company income statement

2011 January to March

Prepared by: Xiangtan Electric Co., Ltd.

Unit: Yuan Currency: RMB audit Type: Unaudited

Project	Amount	Previous period
First, the operating income	759,422,312	658,138,304
Less: Cost of	606,314,665	508,461,601
Business tax and surcharges	841,056	4,840,289
Cost of sales	28,657,114	28,791,719
Management costs	36,614,943	37,552,968
Finance costs	23,970,559	15,249,530
Impairment losses	1,450,522	3,832,808
Add: Fair value gains (losses to "-" means Column)		
Investment income (loss "-" for loss)	90,984	148,333
Of which: investments in associates and joint ventures Income	90,984	148,333
Second, the operating profit ("-" for loss)	61,664,437	59,557,722
Add: operating income	29,253	10,000
Less: operating expenses	94,213	73,558
Of which: Losses on disposal of non current assets		73,558
Third, the total profit (loss is represented by "-" for loss)	61,599,477	59,494,164
Less: Income tax expense	9,226,274	8,901,871
Fourth, the net profit (net loss "-" for loss)	52,373,203	50,592,293
Earnings per share:		
(A) Basic earnings per share		
(Ii) Diluted earnings per share		
Sixth, other comprehensive income		
Seven, total comprehensive income	52,373,203	50,592,293

Legal representative: Zhou Jianxiong Chief Financial Officer: Liu Haiqiang Accounting Department: Fang Fang

Consolidated Cash Flow Statement

January-March 2011

Prepared by: Xiangtan Electric Co., Ltd.

Unit: Yuan Currency: RMB audit Type: Unaudited

Project	Amount	Previous period
First, the cash flow generated from operating activities:		
Sales of goods or services received in cash	1,092,289,964	626,102,183
Refunds of taxes	6,638,780	
Received from other operating activities Cash	74,962,272	18,154,948
Subtotal of cash inflow from operating activities	1,173,891,016	644,257,131
For goods and services paid for in cash	1,316,821,383	647,383,137
Paid to and for employees paid in cash	138,129,185	90,207,482
Payments of taxes	128,762,025	46,870,409
Other cash paid relating to operating activities Cash	152,573,724	96,334,909
Subtotal of cash outflow from operating activities	1,736,286,317	880,795,937
Cash flow from operating activities Net	-562,395,301	-236,538,806
Second, the cash flow from investing activities:		
Disposal of fixed assets, intangible assets and other long-term assets, income Net cash return	2,059,450	2,563,306
Other investment activities Cash	3,486,607	1,623,918
Subtotal of cash inflows	5,546,057	4,187,224
Purchase of fixed assets, intangible assets and long-term support Cash paid for	73,861,478	27,612,404
Cash paid for investments	1,230,000	8,689,880
Other cash paid relating to investing activities Cash	8,727,759	
Cash outflow from investing activities	83,819,237	36,302,284
Cash flows from investing activities Net	-78,273,180	-32,115,060
III Cash flows from financing activities:		
Cash received from investments	9,945,585	
Of which: received from minority shareholders of subsidiary cash		
Cash received from borrowings	1,031,311,804	422,500,000
Received other cash related to financing activities		263,135
Subtotal of cash inflow from financing activities	1,041,257,389	422,763,135
Cash paid for repayment	302,626,250	238
Distribution of dividends, profits or payment of cash interest payme	36,625,330	15,292,264
Cash outflow from financing activities	339,251,580	253,312,514
Cash flows from financing activities, net	702,005,809	169,450,621
Exchange rate changes on cash and cash equivalents	1,805,634	
In cash and cash equivalents	63,142,962	-99,203,245
Add: Cash and cash equivalents	1,462,726,431	396,640,338
VI Cash and cash equivalents	1,525,869,393	297,437,093

Legal representative: Zhou Jianxiong Chief Financial Officer: Liu Haiqiang Accounting Department: Fang Fang

Parent Company Cash Flow Statement

2011 January to March

Prepared by: Xiangtan Electric Co., Ltd.

Unit: Yuan Currency: RMB audit Type: Unaudited

Project	Amount	Previous period
First, the cash flow generated from operating activities:		
Sales of goods or services received in cash	558,758,878	431,376,081
Refunds of taxes	358,807	
Received from other operating activities Cash	54,415,295	11,050,385
Subtotal of cash inflow from operating activities	613,532,980	442,426,466
For goods and services paid for in cash	662,081,108	377,865,074
Paid to and for employees paid in cash	100,554,910	66,736,665
Payments of taxes	19,434,072	17,830,933
Other cash paid relating to operating activities Cash	64,032,681	40,019,689
Subtotal of cash outflow from operating activities	846,102,771	502,452,361
Cash flow from operating activities Net	-232,569,791	-60,025,895
Second, the cash flow from investing activities:		
Disposal of fixed assets, intangible assets and other long-term assets Net cash		63,306
Other investment activities Cash	3,481,100	1,559,170
Subtotal of cash inflows	3,481,100	1,622,476
Acquisition of fixed assets, intangible assets and other long-term assets Cash	24,552,254	2,933,535
Cash paid for investments	12,100,000	2,739,880
Acquisition of subsidiaries and other business units, net of cash paid		
Other cash paid relating to investing activities Cash	7,660,396	
Cash outflow from investing activities	44,312,650	5,673,415
Cash flows from investing activities Net	-40,831,550	-4,050,939
Third, the cash flow from financing activities:		
Cash received from investments		
Cash received from borrowings	738,564,000	302,500,000
Cash received from issuing bonds		
Received other cash related to financing activities		243,066
Subtotal of cash inflow from financing activities	738,564,000	302,743,066
Cash paid for repayment	130,000,000	198
Distribution of dividends, profits or payment of cash interest payments	18,603,682	13,269,174
Meet other cash related to financing activities		
Cash outflow from financing activities	148,603,682	211,269,174
Cash flows from financing activities Net	589,960,318	91,473,892
Exchange rate changes on cash and cash equivalents		
In cash and cash equivalents	316,558,977	27,397,058
Add: Cash and cash equivalents	997,343,401	185,801,701
VI Cash and cash equivalents	1,313,902,378	213,198,759

Legal representative: Zhou Jianxiong Chief Financial Officer: Liu Haiqiang Accounting Department: Fang Fang

湘潭电机股份有限公司

600416

2011 年第一季度报告

PUBLIC VERSION

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§1 重要提示

1.1 本公司董事会、监事会及其董事、监事、高级管理人员保证本报告所载资料不存在任何虚假记载、误导性陈述或者重大遗漏，并对其内容的真实性、准确性和完整性承担个别及连带责任。

1.2 公司全体董事出席董事会会议。

1.3 公司第一季度财务报告未经审计。

1.4 公司负责人周建雄、主管会计工作负责人刘海强及会计机构负责人（会计主管人员）方芳声明：保证本季度报告中财务报告的真实、完整。

§2 公司基本情况

2.1 主要会计数据及财务指标

币种:人民币

	本报告期末	上年度期末	本报告期末比上年度期末增减(%)
总资产(元)	11,129,707,354.00	10,398,356,956.00	7.03
所有者权益（或股东权益）(元)	2,464,030,850.00	2,422,440,433.00	1.72
归属于上市公司股东的每股净资产（元/股）	8.10	10.31	-21.44
	年初至报告期期末		比上年同期增减(%)
经营活动产生的现金流量净额(元)	-562,395,301.00		-107.07
每股经营活动产生的现金流量净额（元/股）	-1.85		-59.35
	报告期	年初至报告期期末	本报告期比上年同期增减(%)
归属于上市公司股东的净利润(元)	37,630,212.00	37,630,212.00	28.40
基本每股收益（元/股）	0.12	0.12	9.09
扣除非经常性损益后的基本每股收益(元/股)	0.11	0.11	不适用
稀释每股收益（元/股）	0.12	0.12	9.09
加权平均净资产收益率（%）	1.54	1.54	减少 0.68 个百分点
扣除非经常性损益后的加权平均净资产收益率（%）	1.36	1.36	减少 0.85 个百分点

扣除非经常性损益项目和金额：

单位：元 币种:人民币

项目	金额
非流动资产处置损益	7,872,294
计入当期损益的政府补助（与企业业务密切相关，按照国家统一标准定额或定量享受的政府补助除外）	724,000

除上述各项之外的其他营业外收入和支出	-1,602
所得税影响额	-2,085,357
少数股东权益影响额（税后）	-2,084,909
合计	4,424,426

2.2 报告期末股东总人数及前十名无限售条件股东持股情况表

单位：股

报告期末股东总数（户）		26,561
前十名无限售条件流通股股东持股情况		
股东名称（全称）	期末持有无限售条件流通股的数量	种类
湘电集团有限公司	105,173,693	人民币普通股
中国工商银行－诺安股票证券投资基金	8,060,773	人民币普通股
中国工商银行－广发聚丰股票型证券投资基金	7,500,000	人民币普通股
上海浦东发展银行－广发小盘成长股票型证券投资基金	7,049,531	人民币普通股
上海星河数码投资有限公司	6,649,900	人民币普通股
海通－中行－FORTIS BANK SA/NV	5,813,709	人民币普通股
中国农业银行－益民创新优势混合型证券投资基金	5,733,140	人民币普通股
银丰证券投资基金	5,016,568	人民币普通股
中国农业银行－信诚四季红混合型证券投资基金	4,367,372	人民币普通股
中国建设银行股份有限公司－广发内需增长灵活配置混合型证券投资基金	2,979,980	人民币普通股

§3 重要事项

3.1 公司主要会计报表项目、财务指标大幅度变动的情况及原因

□适用 √不适用

3.2 重大事项进展情况及其影响和解决方案的分析说明

□适用 √不适用

3.3 公司、股东及实际控制人承诺事项履行情况

□适用 √不适用

3.4 预测年初至下一报告期期末的累计净利润可能为亏损或者与上年同期相比发生大幅度变动的警示及原因说明

□适用 √不适用

湘潭电机股份有限公司

法定代表人：周建雄

2011 年 4 月 28 日

§4 附录

4.1

合并资产负债表

2011 年 3 月 31 日

编制单位: 湘潭电机股份有限公司

单位：元 币种：人民币 审计类型：未经审计

项目	期末余额	年初余额
流动资产：		
货币资金	2,167,978,772	2,481,488,957
应收票据	286,058,400	247,614,290
应收账款	4,252,768,131	3,631,319,407
预付款项	359,996,994	194,925,772
应收利息		2,481,502
其他应收款	117,743,124	106,311,147
买入返售金融资产		
存货	1,805,166,266	1,581,477,726
一年内到期的非流动资产	5,980,000	5,980,000
其他流动资产		
流动资产合计	8,995,691,687	8,251,598,801
非流动资产：		
长期股权投资	149,081,627	147,808,536
投资性房地产		
固定资产	1,308,947,197	1,320,246,910
在建工程	240,412,721	220,881,547
无形资产	151,550,052	172,869,044
开发支出	214,237,824	215,383,450
商誉	634,503	634,503
长期待摊费用		
递延所得税资产	69,151,743	68,934,165
其他非流动资产		
非流动资产合计	2,134,015,667	2,146,758,155
资产总计	11,129,707,354	10,398,356,956
流动负债：		
短期借款	1,621,502,684	1,498,469,780
应付票据	1,583,254,630	1,467,787,961
应付账款	3,197,719,217	2,823,817,296
预收款项	380,164,488	326,999,582
卖出回购金融资产款		
应付手续费及佣金		
应付职工薪酬	43,154,970	52,338,957
应交税费	143,727,778	185,118,634

其他应付款	202,841,513	151,988,774
一年内到期的非流动负债	155,810,354	220,810,354
其他流动负债		
流动负债合计	7,328,175,634	6,727,331,338
非流动负债：		
长期借款	480,000,000	410,000,000
专项应付款	12,500,000	12,500,000
预计负债	146,726,819	144,669,323
递延所得税负债	7,706,123	7,706,123
其他非流动负债	68,827,435	65,094,194
非流动负债合计	715,760,377	639,969,640
负债合计	8,043,936,011	7,367,300,978
所有者权益（或股东权益）：		
实收资本（或股本）	304,242,271	304,242,271
资本公积	1,562,183,978	1,562,138,364
盈余公积	105,243,344	105,243,344
一般风险准备		
未分配利润	494,293,593	456,663,381
外币报表折算差额	-1,932,336	-5,846,927
归属于母公司所有者权益合计	2,464,030,850	2,422,440,433
少数股东权益	621,740,493	608,615,545
所有者权益合计	3,085,771,343	3,031,055,978
负债和所有者权益总计	11,129,707,354	10,398,356,956

公司法定代表人: 周建雄　　主管会计工作负责人:刘海强　　会计机构负责人:方芳

母公司资产负债表

2011 年 3 月 31 日

编制单位: 湘潭电机股份有限公司

单位:元 币种:人民币 审计类型:未经审计

项目	期末余额	年初余额
流动资产:		
货币资金	1,628,778,636	1,462,021,505
应收票据	285,038,450	241,272,944
应收账款	1,455,047,502	1,085,172,366
预付款项	64,363,256	64,052,581
应收利息		2,481,502
其他应收款	72,105,647	81,959,823
存货	746,307,416	730,905,792
流动资产合计	4,251,640,907	3,667,866,513
非流动资产:		
长期股权投资	687,492,576	675,301,592
投资性房地产		
固定资产	825,643,468	834,507,496
在建工程	139,736,678	125,698,036
无形资产	3,791,693	4,085,035
递延所得税资产	19,457,202	19,239,624
其他非流动资产		
非流动资产合计	1,676,121,617	1,658,831,783
资产总计	5,927,762,524	5,326,698,296
流动负债:		
短期借款	898,564,000	265,000,000
交易性金融负债		
应付票据	949,096,195	905,762,551
应付账款	844,439,833	980,482,826
预收款项	215,578,154	207,008,725
应付职工薪酬	21,620,669	29,426,126
应交税费	77,935,157	52,345,950
其他应付款	49,752,195	42,102,068
一年内到期的非流动负债	80,000,000	145,000,000
其他流动负债		
流动负债合计	3,136,986,203	2,627,128,246
非流动负债:		
长期借款	450,000,000	410,000,000
预计负债	6,542,912	7,064,844
递延所得税负债		
其他非流动负债	40,360,106	41,005,106
非流动负债合计	496,903,018	458,069,950

负债合计	3,633,889,221	3,085,198,196
所有者权益（或股东权益）：		
实收资本（或股本）	304,242,271	304,242,271
资本公积	1,516,349,418	1,516,349,418
减：库存股		
专项储备		
盈余公积	105,243,344	105,243,344
一般风险准备	368,038,270	315,665,067
未分配利润		
所有者权益（或股东权益）合计	2,293,873,303	2,241,500,100
负债和所有者权益（或股东权益）总计	5,927,762,524	5,326,698,296

公司法定代表人: 周建雄　　主管会计工作负责人:刘海强　　会计机构负责人: 方芳

合并利润表

2011 年 1—3 月

编制单位: 湘潭电机股份有限公司

单位：元 币种：人民币 审计类型：未经审计

项目	本期金额	上期金额
一、营业总收入	1,241,296,933	938,551,972
其中：营业收入	1,241,296,933	938,551,972
利息收入		
已赚保费		
手续费及佣金收入		
二、营业总成本	1,203,429,412	901,503,827
其中：营业成本	1,018,412,857	738,437,405
营业税金及附加	3,813,176	5,708,557
销售费用	57,535,217	58,034,039
管理费用	81,276,960	81,052,290
财务费用	40,940,680	14,438,728
资产减值损失	1,450,522	3,832,808
加：公允价值变动收益（损失以“－”号填列）		
投资收益（损失以“－”号填列）	43,089	148,333
其中：对联营企业和合营企业的投资收益	43,089	148,333
汇兑收益（损失以“－”号填列）		
三、营业利润（亏损以“－”号填列）	37,910,610	37,196,478
加：营业外收入	8,718,806	573,565
减：营业外支出	124,114	448,145
其中：非流动资产处置损失		78,205
四、利润总额（亏损总额以“－”号填列）	46,505,302	37,321,898
减：所得税费用	9,411,219	9,713,453
五、净利润（净亏损以“－”号填列）	37,094,083	27,608,445
归属于母公司所有者的净利润	37,630,212	29,307,007
少数股东损益	-536,129	-1,698,562
六、每股收益：		
（一）基本每股收益	0.12	0.11
（二）稀释每股收益	0.12	0.11
七、其他综合收益	17,085,154	-8,653,248
八、综合收益总额	54,179,237	18,955,197
归属于母公司所有者的综合收益总额	41,590,417	24,893,850
归属于少数股东的综合收益总额	12,588,820	-5,938,653

公司法定代表人: 周建雄　　主管会计工作负责人:刘海强　　会计机构负责人:方芳

母公司利润表

2011 年 1—3 月

编制单位: 湘潭电机股份有限公司

单位：元 币种：人民币 审计类型：未经审计

项目	本期金额	上期金额
一、营业收入	759,422,312	658,138,304
减：营业成本	606,314,665	508,461,601
营业税金及附加	841,056	4,840,289
销售费用	28,657,114	28,791,719
管理费用	36,614,943	37,552,968
财务费用	23,970,559	15,249,530
资产减值损失	1,450,522	3,832,808
加：公允价值变动收益（损失以“－”号填列）		
投资收益（损失以“－”号填列）	90,984	148,333
其中：对联营企业和合营企业的投资收益	90,984	148,333
二、营业利润（亏损以“－”号填列）	61,664,437	59,557,722
加：营业外收入	29,253	10,000
减：营业外支出	94,213	73,558
其中：非流动资产处置损失		73,558
三、利润总额（亏损总额以“－”号填列）	61,599,477	59,494,164
减：所得税费用	9,226,274	8,901,871
四、净利润（净亏损以“－”号填列）	52,373,203	50,592,293
五、每股收益：		
（一）基本每股收益		
（二）稀释每股收益		
六、其他综合收益		
七、综合收益总额	52,373,203	50,592,293

公司法定代表人: 周建雄　　主管会计工作负责人:刘海强　　会计机构负责人:方芳

合并现金流量表

2011 年 1—3 月

编制单位: 湘潭电机股份有限公司

单位：元 币种：人民币 审计类型：未经审计

项目	本期金额	上期金额
一、经营活动产生的现金流量：		
销售商品、提供劳务收到的现金	1,092,289,964	626,102,183
收到的税费返还	6,638,780	
收到其他与经营活动有关的现金	74,962,272	18,154,948
经营活动现金流入小计	1,173,891,016	644,257,131
购买商品、接受劳务支付的现金	1,316,821,383	647,383,137
支付给职工以及为职工支付的现金	138,129,185	90,207,482
支付的各项税费	128,762,025	46,870,409
支付其他与经营活动有关的现金	152,573,724	96,334,909
经营活动现金流出小计	1,736,286,317	880,795,937
经营活动产生的现金流量净额	-562,395,301	-236,538,806
二、投资活动产生的现金流量：		
处置固定资产、无形资产和其他长期资产收回的现金净额	2,059,450	2,563,306
收到其他与投资活动有关的现金	3,486,607	1,623,918
投资活动现金流入小计	5,546,057	4,187,224
购建固定资产、无形资产和其他长期资产支付的现金	73,861,478	27,612,404
投资支付的现金	1,230,000	8,689,880
支付其他与投资活动有关的现金	8,727,759	
投资活动现金流出小计	83,819,237	36,302,284
投资活动产生的现金流量净额	-78,273,180	-32,115,060
三、筹资活动产生的现金流量：		
吸收投资收到的现金	9,945,585	
其中：子公司吸收少数股东投资收到的现金		
取得借款收到的现金	1,031,311,804	422,500,000
收到其他与筹资活动有关的现金		263,135
筹资活动现金流入小计	1,041,257,389	422,763,135
偿还债务支付的现金	302,626,250	238,000,000
分配股利、利润或偿付利息支付的现金	36,625,330	15,292,264
筹资活动现金流出小计	339,251,580	253,312,514
筹资活动产生的现金流量净额	702,005,809	169,450,621
四、汇率变动对现金及现金等价物的影响	1,805,634	
五、现金及现金等价物净增加额	63,142,962	-99,203,245
加：期初现金及现金等价物余额	1,462,726,431	396,640,338
六、期末现金及现金等价物余额	1,525,869,393	297,437,093

公司法定代表人: 周建雄 主管会计工作负责人:刘海强 会计机构负责人:方芳

母公司现金流量表

2011 年 1—3 月

编制单位: 湘潭电机股份有限公司

单位:元 币种:人民币 审计类型:未经审计

项目	本期金额	上期金额
一、经营活动产生的现金流量：		
销售商品、提供劳务收到的现金	558,758,878	431,376,081
收到的税费返还	358,807	
收到其他与经营活动有关的现金	54,415,295	11,050,385
经营活动现金流入小计	613,532,980	442,426,466
购买商品、接受劳务支付的现金	662,081,108	377,865,074
支付给职工以及为职工支付的现金	100,554,910	66,736,665
支付的各项税费	19,434,072	17,830,933
支付其他与经营活动有关的现金	64,032,681	40,019,689
经营活动现金流出小计	846,102,771	502,452,361
经营活动产生的现金流量净额	-232,569,791	-60,025,895
二、投资活动产生的现金流量：		
处置固定资产、无形资产和其他长期资产收回的现金净额		63,306
收到其他与投资活动有关的现金	3,481,100	1,559,170
投资活动现金流入小计	3,481,100	1,622,476
购建固定资产、无形资产和其他长期资产支付的现金	24,552,254	2,933,535
投资支付的现金	12,100,000	2,739,880
取得子公司及其他营业单位支付的现金净额		
支付其他与投资活动有关的现金	7,660,396	
投资活动现金流出小计	44,312,650	5,673,415
投资活动产生的现金流量净额	-40,831,550	-4,050,939
三、筹资活动产生的现金流量：		
吸收投资收到的现金		
取得借款收到的现金	738,564,000	302,500,000
发行债券收到的现金		
收到其他与筹资活动有关的现金		243,066
筹资活动现金流入小计	738,564,000	302,743,066
偿还债务支付的现金	130,000,000	198,000,000
分配股利、利润或偿付利息支付的现金	18,603,682	13,269,174
支付其他与筹资活动有关的现金		
筹资活动现金流出小计	148,603,682	211,269,174
筹资活动产生的现金流量净额	589,960,318	91,473,892
四、汇率变动对现金及现金等价物的影响		
五、现金及现金等价物净增加额	316,558,977	27,397,058
加：期初现金及现金等价物余额	997,343,401	185,801,701
六、期末现金及现金等价物余额	1,313,902,378	213,198,759

公司法定代表人: 周建雄 主管会计工作负责人:刘海强 会计机构负责人:方芳

6. Xinhua News Agency. 2011. Hunan Electric shares rise attempting to use equity incentive plan profits. July 19, 2011. Accessed at: http://big5.xinhuanet.com/gate/big5/news.xinhuanet.com/finance/2011-07/19/c_121686382.htm

Hunan Electric shares rise attempting to use any equity incentive plan profits

July 19, 2011 09:02:41 Source: Sichuan Online - Financial Investment News [font big small】【Favorite】【Print】【Close】 Xinhua microblogging to share

The reporter Rao Yuanyuan

Investors rebellion "billion big one" did not notice

Six months ago, Mr. Liu investors to "financial investment" reporter to tell the Hunan and Hunan Electric Power Group shares (600 416) regarding the transfer of XEMC's protracted, May 18, Hunan Electric shares issued notice that , shareholders agreed to acquire XEMC 49% of the shares. So far, Hunan XEMC Hunan Electric Co., Ltd. became a wholly owned subsidiary shares.

Recently, investors once again to Mr. Liu, "Financial Investment News" report: "I have conclusive evidence that wind power has a net profit of Mingxiang 10 billion big one does not notice." Mr. Liu believes that this confirmed his guess before that companies do not want to share in the equity incentive before the red too high in order to facilitate the launch of the company's senior equity incentive to maximize profits.

Mr. Liu's three "evidence" chain

Mr. Liu to the reporter mentioned the "evidence" there are three: First, in the Hunan Provincial Department of Commerce site has a government of "Hunan XEMC invest in Bulgaria, the electric field application report," the instructions; two sites in the future worries Hunan Electric shares have job posting, place of work as "Bulgaria"; third is in line with potatoes, called "May 11, 2011 Hunan Electric shares joint research record."

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Meanwhile, in the future worry-free web site does have XEMC Limited issued a recruitment GC-EPC project site manager wind farm announcement, release time, "2011-06-26" in the "workplace" column shows "the company headquarters in Xiangtan, Hunan, this post belongs to a long trip around the world wind farms, currently Bulgaria."

The most important "evidence" is potato line called "May 11, 2011 Hunan Electric shares joint research record." Reporters in the potatoes to the online search recording, correspondent of the recording were consolidated:

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Mr. Liu said: "The evidence of these three, the continuity in time, have every reason to believe that this project is Zhou Jianxiong Bulgaria, said that 'Europe', 'net profit of at least 10 billion' of the project, while the time now has in the past almost two months, Hunan Electric shares which it kept secret. "Mr. Liu believes that this proof of his reasoning: Hunan Electric shares will be the implementation of equity incentive, before that, Hunan and Hunan Electric Power Group Corporation shares do not want to stock price is too high, which is conducive to the implementation of equity incentive to maximize the benefits when the company's senior. However, Mr. Liu said that this is for ordinary investors a fraud, a disguised form of loss; the good news does not have a major announcement, but also a violation of the relevant provisions of the Commission. "

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Hunan Electric shares: equity-based incentives in promoting

So, Hunan Department of Commerce instructed that XEMC field construction projects in Bulgaria is not recorded in the Hunan Electric shares, chairman Zhou Jianxiong called "net profit at least 10 million" project? If so, why Hunan Electric shares not yet issued notice? The reason they are such as Mr. Liu guess, before the introduction of the equity incentive stock down as much as possible in order to inspire the launch of the company stock price rise more profitable?

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Reporter: "the current progress of the project?"

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For other questions, in that the reporter's identity, the staff member immediately silent.

Reporter was removed several times, finally linked to equity securities on behalf of Li Yiwen Xiang power, he replied: "'s a lot of things to notice when the announcement naturally, there is no time to disclose, I do not know the specific time, the chairman does not know because the relevant procedures to go, and there are a decision-making process, must follow the procedures step by step. Frankly, I share the chairman of Hunan power than you, more than investors are still worried, because it is the shareholders interests, so I can only say that this project is still advancing. "

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Speculation for investors Liu, Li Yiwen, said: "I do not know this, I can not answer." Then hung up the reporter's phone.

"Although Gordon did not acknowledge the power of equity securities on behalf of the Department of Commerce, Hunan instructions of Bulgarian project is recording Zhou Jianxiong said 'at least 10 million net profit' of the project, but did not deny, including incentive stock options and things did not completely deny , but does not notice 'good' and the reasons are far-fetched. In my opinion, Hunan Electric shares are now just want to stall for time, perhaps soon after the equity incentive came out while us ordinary investors secretly suffered a major loss. "Liu Mr. that.

In this regard, "Financial Investment News" will continue to follow-up reports.

湘電股份高層欲借股權激勵謀暴利否

2011年07月19日 09:02:41 來源：四川在線-金融投資報【字號 大 小】【收藏】【打印】【關閉】 分享到新華微博

本報記者 饒媛媛

投資者報料“10億大單”未公告

半年前，股民劉先生向《金融投資報》記者訴說了湘電集團和湘電股份(600416)在湘電風能轉讓一事上的久拖不決，5月18日，湘電股份發公告稱，股東大會同意收購湘電風能49%的股權。至此，湖南湘電風能股份有限公司成為湘電股份的全資子公司。

日前，股民劉先生再次向《金融投資報》反映：“我有確鑿證據證明湘電風能有一項淨利潤達10億元的大單沒有公告。”劉先生認為，這證實了他之前的推測，即公司不想在股權激勵之前讓股價衝得太高，以便于在股權激勵推出時公司高層獲利最大化。

劉先生的三大“證據”鏈

劉先生給記者提到的“證據”有三：一是在湖南省商務廳的網站上有政府對“湖南湘電風能申請保加利亞投資建設電場的報告”的批示；二是在前程無憂網站上有湘電股份的招聘啟事，工作地點為“保加利亞”；三是在土豆網上有名為“2011年5月11日湘電股份聯合調研錄音”。

記者隨即對這三個“證據”進行了核實：湖南省商務廳的網站上，在“政務公開”一欄中的“結果公示”裏，的確出現了這樣的公告：申報單位均為“湖南湘電風能有限公司”，所屬項目分別為“申請保加利亞投資建設風電場的報告(50MW)”和“申請保加利亞投資建設風電場的報告”，而兩者的反饋結果均為“本項目已辦結”，時間均為“2011-05-23”。

同時，在前程無憂的網站上也確實有湘電風能有限公司發出的招聘GC-風電場EPC項目現場經理的公告，發布時間為“2011-06-26”，在“工作地點”一欄中顯示“公司總部在湖南湘潭，本職位長期出差全球各所屬風電場，目前為保加利亞”。

而最重要的“證據”也就是土豆網上名為“2011年5月11日湘電股份聯合調研錄音”。記者在土豆網上搜索到了這個錄音，記者對錄音進行了整理：

湘電股份董事長周建雄在介紹出口訂單時說：“在歐洲已經草簽一個協議，有515臺，歐洲還有一個單子，107臺，美國的32臺，其中有10臺是5兆的風機。”

周建雄說：“我們有個風廠，做了個基本測算，不是說已經成功了，我們是朝成功的方向去打，假設成功，淨利潤最少10個億人民幣。”

周建雄還說：“湘電集團下面，有個湘電新能源，注冊資本金20億，是集團最大的一個公司，整個公司中20來人全是跑市場，這個公司只準買湘電的風機，價格也鎖死，完全是幫股份公司。下一步應該會越來越好，今年目標800臺。”

劉先生認為：“這三個證據，在時間上具有連續性，完全有理由相信保加利亞這個項目正是周建雄說的那個‘歐洲的’、‘淨利潤至少10個億’的項目。而現在時間已過去快兩個月了，湘電股份對此卻秘而不宣。”劉先生認為，這證明了他的推論：湘電股份將要實施股

權激勵，在這之前，湘電集團和湘電股份不希望公司股價過高，這有利于股權激勵施行時公司高層利益的最大化。然而，劉先生表示，這對普通投資者來說是一種欺騙，一種變相的損失；而有重大利好消息不公告，也違反了證監會有關規定。”

四川閏則律師事務所朱紅宇律師在接受記者採訪時表示：“證監會《關于規范上市公司信息披露及相關各方行為的通知》明確指出，‘對于正在籌劃中的可能影響公司股價的重大事項’要及時進行披露。如果湘電股份旗下全資子公司真有‘淨利潤至少10個億’的項目而不公告，則違反了證監會的相關規定。而如果背後的目的真是為了讓公司高層在股權激勵時獲利更多，這更是重大的違規行為，證監會可做相應的處罰。”

湘電股份：股權激勵在推進

那麼，湖南商務廳批示的那個湘電風能在保加利亞建設電場的項目是不是錄音中湘電股份董事長周建雄所說的“淨利潤至少10億”的項目？如果是，湘電股份為什麼到現在還不發公告？其中的原因又是否如劉先生所猜測的，在股權激勵推出之前盡量壓低股價，以便在股價激勵推出時讓公司高層獲利更多？

記者首先以投資者身份撥打了湘電股份證券部的電話。第一次打過去時，一位工作人員表示其證券代表不在，有什麼問題可以向他提。于是，記者提到了湖南商務廳網站上湘電風能申請保加利亞建設電場的項目。

記者：“項目目前進展如何？”

工作人員：“保加利亞這個項目確實有，也在實施了，沒披露是因為還沒到披露階段。因為這麼大的項目有很多的程序要走。另外，這個項目之前決定的是由湘電風能來做前期的投產，但現在有可能要改為由湘電新能源來做前期的風場建設(湘電新能源，即錄音中，湘電股份董事長周建雄提到的湘電集團注資20億的全資子公司)。可以確定的是，不管前期的投產誰來做，這個風場的風機肯定完全是由湘電風能提供，估計利潤有7個多億，但這個最終的結果還沒有出來。”

而對于其他問題，在得知記者的身份後，這位工作人員立即三緘其口。

記者幾經輾轉，終于聯係到湘電股份證券代表李怡文，他的回答是：“公司的很多事情到了公告的時候自然會公告，目前還沒有到披露時間，具體時間我不知道，董事長也不知道。因為有相關的程序要走，這裏面有一個決策的過程，必須按照程序一步一步走。老實講，我和湘電股份的董事長比你們、比投資者都還著急，因為這與股東的利益有關。所以，我只能說，這個項目還在推進中。”

對于錄音中董事長周建雄提到的那個“淨利潤至少10個億”的項目是否為湖南商務廳批示的保加利亞的項目的問題，李怡文回答：“歐洲那麼大，不一定就是保加利亞。我目前還沒有接到通知，無法回答這個問題。”

對于湘電股份不公告利好消息是否為了讓公司高層在股權激勵中獲利最大化這一問題時，李怡文說：“我了解的情況是湘電集團有一個股權激勵在推進，具體進展到什麼情況我不清楚，而湘電股份目前還沒有具體做決策的程序。可能前期有股東在決策，但我們現在也不知道。”

對于股民劉先生的猜測，李怡文說：“這個問題我不知道，我無法回答。”隨即挂斷了記者的電話。

“盡管湘電股份證券代表沒有承認湖南商務廳批示的保加利亞項目就是錄音中周建雄所說的‘淨利潤至少10個億’的項目，但也沒否認，包括股權激勵的事情也並沒有完全否定，

但不公告‘利好’的原因很牽強。依我看，湘電股份現在就是想拖延時間，說不定不久後股權激勵就出來了。而我們這些普通投資者暗地裏卻吃了大虧。”劉先生認為。

對此，《金融投資報》還將繼續跟蹤報道。

7. Finance.sina.com.cn. 2011. Hunan Electric shares rise attempting to use equity incentive plan profits. July 19, 2011. Accessed at: http://finance.sina.com.cn/stock/s/20110719/083510170215.shtml

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Posted 2011年07月19日08:35 Financial Investment News

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(10.67 , 0.35 , 3.39%)

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湘电股份高层欲借股权激励谋暴利否

http://www.sina.com.cn 2011年07月19日 08:35 金融投资报

本报记者 饶媛媛

投资者报料“10亿大单”未公告

半年前，股民刘先生向《金融投资报》记者诉说了湘电集团和湘电股份(10.67,0.35,3.39%)(600416)在湘电风能转让一事上的久拖不决，5月18日，湘电股份发公告称，股东大会同意收购湘电风能49%的股权。至此，湖南湘电风能股份有限公司成为湘电股份的全资子公司。

日前，股民刘先生再次向《金融投资报》反映：“我有确凿证据证明湘电风能有一项净利润达10亿元的大单没有公告。”刘先生认为，这证实了他之前的推测，即公司不想在股权激励之前让股价冲得太高，以便于在股权激励推出时公司高层获利最大化。

刘先生的三大“证据”链

刘先生给记者提到的“证据”有三：一是在湖南省商务厅的网站上有政府对“湖南湘电风能申请保加利亚投资建设电场的报告”的批示；二是在前程无忧网站上有湘电股份的招聘启事，工作地点为“保加利亚”；三是在土豆网上有名为“2011年5月11日湘电股份联合调研录音”。

记者随即对这三个“证据”进行了核实：湖南省商务厅的网站上，在“政务公开”一栏中的“结果公示”里，的确出现了这样的公告：申报单位均为“湖南湘电风能有限公司”，所属项目分别为“申请保加利亚投资建设风电场的报告(50MW)”和“申请保加利亚投资建设风电场的报告”，而两者的反馈结果均为“本项目已办结”，时间均为“2011-05-23”。

同时，在前程无忧的网站上也确实有湘电风能有限公司发出的招聘GC-风电场EPC项目现场经理的公告，发布时间为“2011-06-26”，在“工作地点”一栏中显示“公司总部在湖南湘潭，本职位长期出差全球各所属风电场，目前为保加利亚”。

而最重要的“证据”也就是土豆网上名为“2011年5月11日湘电股份联合调研录音”。记者在土豆网上搜索到了这个录音，记者对录音进行了整理：

湘电股份董事长周建雄在介绍出口订单时说：“在欧洲已经草签一个协议，有515台，欧洲还有一个单子，107台，美国的32台，其中有10台是5兆的风机。”

周建雄说：“我们有个风厂，做了个基本测算，不是说已经成功了，我们是朝成功的方向去打，假设成功，净利润最少10个亿人民币。”

周建雄还说：“湘电集团下面，有个湘电新能源，注册资本金20亿，是集团最大的一个公司，整个公司中20来人全是跑市场，这个公司只准买湘电的风机，价格也锁死，完全是帮股份公司。下一步应该会越来越好，今年目标800台。”

刘先生认为：“这三个证据，在时间上具有连续性，完全有理由相信保加利亚这个项目正是周建雄说的那个‘欧洲的’、‘净利润至少10个亿’的项目。而现在时间已过去快两个月了，湘电股份

对此却秘而不宣。”刘先生认为，这证明了他的推论：湘电股份将要实施股权激励，在这之前，湘电集团和湘电股份不希望公司股价过高，这有利于股权激励施行时公司高层利益的最大化。然而，刘先生表示，这对普通投资者来说是一种欺骗，一种变相的损失；而有重大利好消息不公告，也违反了证监会有关规定。”

四川闰则律师事务所朱红宇律师在接受记者采访时表示：“证监会《关于规范上市公司信息披露及相关各方行为的通知》明确指出，‘对于正在筹划中的可能影响公司股价的重大事项’要及时进行披露。如果湘电股份旗下全资子公司真有‘净利润至少10个亿’的项目而不公告，则违反了证监会的相关规定。而如果背后的目的真是为了让公司高层在股权激励时获利更多，这更是重大的违规行为，证监会可做相应的处罚。”

湘电股份：股权激励在推进

那么，湖南商务厅批示的那个湘电风能在保加利亚建设电场的项目是不是录音中湘电股份董事长周建雄所说的“净利润至少10亿”的项目？如果是，湘电股份为什么到现在还不发公告？其中的原因又是否如刘先生所猜测的，在股权激励推出之前尽量压低股价，以便在股价激励推出时让公司高层获利更多？

记者首先以投资者身份拨打了湘电股份证券部的电话。第一次打过去时，一位工作人员表示其证券代表不在，有什么问题可以向他提。于是，记者提到了湖南商务厅网站上湘电风能申请保加利亚建设电场的项目。

记者：“项目目前进展如何？”

工作人员：“保加利亚这个项目确实有，也在实施了，没披露是因为还没到披露阶段。因为这么大的项目有很多的程序要走。另外，这个项目之前决定的是由湘电风能来做前期的投产，但现在有可能要改为由湘电新能源来做前期的风场建设(湘电新能源，即录音中，湘电股份董事长周建雄提到的湘电集团注资20亿的全资子公司)。可以确定的是，不管前期的投产谁来做，这个风场的风机肯定完全是由湘电风能提供，估计利润有7个多亿，但这个最终的结果还没有出来。”

而对于其他问题，在得知记者的身份后，这位工作人员立即三缄其口。

记者几经辗转，终于联系到湘电股份证券代表李怡文，他的回答是：“公司的很多事情到了公告的时候自然会公告，目前还没有到披露时间，具体时间我不知道，董事长也不知道。因为有相关的程序要走，这里面有一个决策的过程，必须按照程序一步一步走。老实讲，我和湘电股份的董事长比你们、比投资者都还着急，因为这与股东的利益有关。所以，我只能说，这个项目还在推进中。”

对于录音中董事长周建雄提到的那个“净利润至少10个亿”的项目是否为湖南商务厅批示的保加利亚的项目的问题，李怡文回答：“欧洲那么大，不一定就是保加利亚。我目前还没有接到通知，无法回答这个问题。”

对于湘电股份不公告利好消息是否为了让公司高层在股权激励中获利最大化这一问题时，李怡文说：“我了解的情况是湘电集团有一个股权激励在推进，具体进展到什么情况我不清楚，而湘电股份目前还没有具体做决策的程序。可能前期有股东在决策，但我们现在也不知道。”

对于股民刘先生的猜测，李怡文说：“这个问题我不知道，我无法回答。”随即挂断了记者的电话。

“尽管湘电股份证券代表没有承认湖南商务厅批示的保加利亚项目就是录音中周建雄所说的‘净利润至少10个亿’的项目，但也没否认，包括股权激励的事情也并没有完全否定，但不公告‘利好’的原因很牵强。依我看，湘电股份现在就是想拖延时间，说不定不久后股权激励就出来了。而我们这些普通投资者暗地里却吃了大亏。”刘先生认为。

对此，《金融投资报》还将继续跟踪报道。

8. China.com.cn. 2011. Hunan Electric shares rise attempting to use equity incentive plan profits. July 19, 2011. Accessed at: http://news.china.com.cn/rollnews/2011-07/19/content_9003515.htm

Hunan Electric shares rise attempting to use any equity incentive plan profitsTime: 2011-07-19 09:10:00 Source: People Rao Yuanyuan comment>>
Keywords: Gordon, chairman of the Bulgarian electricity evidence of equity incentive shares

Summary: Six months ago, Mr. Liu investors to "financial investment" reporter to tell the Hunan and Hunan Electric Power Group shares (600,416) in XEMC regarding the protracted transfer, May 18, Hunan Electric shares issued Notice that the shareholders agreed to acquire XEMC 49% of the shares. "For the recording, chairman Zhou Jianxiong said that" at least 10 million net profit, "the project is for the instruction of the Bulgarian Chamber of Commerce of Hunan project issues, Li Yiwen replied:" Europe's big, not necessarily Bulgaria.

Investors rebellion "billion big one" did not notice

Six months ago, Mr. Liu investors to "financial investment" reporter to tell the Hunan and Hunan Electric Power Group shares (600 416) regarding the transfer of XEMC's protracted, May 18, Hunan Electric shares issued notice that the shareholders agreed to acquire XEMC 49% stake. So far, Hunan XEMC Hunan Electric Co., Ltd. became a wholly owned subsidiary shares.

Recently, investors once again to Mr. Liu, "Financial Investment News" report: "I have conclusive evidence that wind power has a net profit of Mingxiang 10 billion big one does not notice." Mr. Liu believes that this confirms the speculation before him, that companies do not want to share in the equity incentive before the red too high in order to facilitate the launch of the company's senior equity incentive to maximize profits.

Mr. Liu's three "evidence" chain

Mr. Liu to the reporter mentioned the "evidence" there are three: First, in the Hunan Provincial Department of Commerce site has a government of "Hunan XEMC invest in Bulgaria, the electric field application report," the instructions; the second is on the website in the future worries Hunan Electric shares of the job posting, place of work as "Bulgaria"; third is in line with potatoes, called "May 11, 2011 Hunan Electric shares joint research record."

The reporter then these three "evidence" are checked: Hunan Provincial Department of Commerce website, the "government affairs" column of the "results of the public" where there were indeed such a notice: reporting units are "HUNAN Wind Power Co., Ltd. ", their project was" to apply the construction of Bulgarian wind farm investment report (50MW) "and" Application for the construction of Bulgarian wind farm investment report, "both of which are the result of feedback," this project has been done knot ", the time is" 2011-05-23. "

Meanwhile, in the future worry-free web site does have XEMC Limited issued a recruitment GC-EPC project site manager wind farm announcement, release time, "2011-06-26" in the "workplace" column shows "the company headquarters in Xiangtan, Hunan, this post belongs to a long trip around the world wind farms, currently Bulgaria."

The most important "evidence" is potato line called "May 11, 2011 Hunan Electric shares joint research record." Reporters in the potatoes to the online search recording, correspondent of the recording were consolidated:

Hunan Electric shares, chairman Zhou Jianxiong said export orders in the introduction: "In Europe, an agreement has been initialed, there are 515 units, there is a list of Europe, 107 Taiwan, the United States, 32, 10 which is 5 megabytes of fans. "

Zhou Jianxiong said: "We have a wind plant, do basic calculations, is not said to have been successful, we are successful in the direction towards the play, assuming success, net profit of at least 10 million yuan."

Zhou Jianxiong said: "Hunan Electric Group below, there is a new energy power Xiang, registered capital of 2 billion, a company is the largest group, 20 people throughout the company are all running the market, the company will only be allowed to buy electricity Hunan fan, the price lock, stock company to help complete the next step should be getting better and better, this year the target 800. "

Mr. Liu said: "The evidence of these three, the continuity in time, have every reason to believe that this project is Zhou Jianxiong Bulgaria, said that 'Europe', 'net profit of at least 10 billion' of the project, while the time now has in the past almost two months, Hunan Electric shares which it kept secret. "Mr. Liu believes that this proof of his reasoning: Hunan Electric shares will be the implementation of equity incentive, before that, Hunan and Hunan Electric Power Group Corporation shares do not want to stock price is too high, which is conducive to the implementation of equity incentive to maximize the benefits when the company's senior. However, Mr. Liu said that this is for ordinary investors a fraud, a disguised form of loss; the good news does not have a major announcement, but also a violation of the relevant provisions of the Commission. "

Run the law firm Zhu Hongyu Sichuan lawyer, said in an interview with reporters: "SFC" on information disclosure of listed companies and related parties act notice "clearly states, 'is being planned for the possibility of significant matters affecting the company's stock price 'timely disclosure if the Hunan Electric shares, a wholly owned subsidiary of really' net profit of at least 10 billion 'projects without notice, the violation of the relevant provisions of the Commission, while if the purpose behind the company's executives in order to really more profitable when the equity incentive, which is a major violation, the Commission can do the appropriate punishment. "

Hunan Electric shares: equity-based incentives in promoting

So, Hunan Department of Commerce instructed that XEMC field construction projects in Bulgaria is not recorded in the Hunan Electric shares, chairman Zhou Jianxiong called "net profit at least 10 million" project? If so, why Hunan Electric shares not yet issued notice? The reason they are such as Mr. Liu guess, before the introduction of the equity incentive stock down as much as possible in order to inspire the launch of the company stock price rise more profitable?

Reporters first as an investor call the Hunan Electric shares of securities on the phone. When the first hit in the past, said a staff member on behalf of its securities is not, what problems can be put to him. So, the reporter mentioned the Hunan Department of Commerce website XEMC apply the electric field of the Bulgarian construction project.

Reporter: "the current progress of the project?"

Staff: "Bulgaria does have this project, also implemented, no disclosure is not to disclose because the stage, because such a large project there are many procedures to go. In addition, this project is before the decision to XEMC do pre-production, but now may have to be replaced by the Hunan Electric's new energy to do the pre-

construction wind farm (Xiang power of new energy, that is, recording, Hunan Electric shares mentioned in Hunan, Chairman Zhou Jianxiong injection of two billion Power Group wholly-owned subsidiary). it is certain that, no matter who is doing pre-production, the wind turbines is certainly entirely by XEMC provide an estimated seven billion profit, but the end result has not come out . "

For other questions, in that the reporter's identity, the staff member immediately silent.

Reporter was removed several times, finally linked to equity securities on behalf of Li Yiwen Xiang power, he replied: "'s a lot of things to notice when the announcement naturally, there is no time to disclose, I do not know the specific time, the chairman does not know because the relevant procedures to go, and there are a decision-making process, must follow the procedures step by step. Frankly, I share the chairman of Hunan power than you, more than investors are still worried, because it is the shareholders interests, so I can only say that this project is still advancing. "

For the recording, chairman Zhou Jianxiong said that "at least 10 million net profit," the project is for the instruction of the Bulgarian Chamber of Commerce of Hunan project issues, Li Yiwen replied: "Europe's big, is not necessarily a Bulgarian and I currently not received notice, can not answer this question. "

For the Hunan Electric shares good news does not notice whether to allow executives to profit in the equity incentive to maximize this issue, Li Yiwen, said: "I understand it is the Hunan Electric Group has an equity incentive in advance what the specific situation to progress I do not know, and Hunan Electric shares there is no specific decision making procedures. Shareholders may have early in the decision, but we do not know. "

Speculation for investors Liu, Li Yiwen, said: "I do not know this, I can not answer." Then hung up the reporter's phone.

"Although Gordon did not acknowledge the power of equity securities on behalf of the Department of Commerce, Hunan instructions of Bulgarian project is recording Zhou Jianxiong said 'at least 10 million net profit' of the project, but did not deny, including incentive stock options and things did not completely deny , but does not notice 'good' and the reasons are far-fetched. In my opinion, Hunan Electric shares are now just want to stall for time, perhaps soon after the equity incentive came out while us ordinary investors secretly suffered a major loss. "Liu Mr. that.

In this regard, "Financial Investment News" will continue to follow-up reports.

湘电股份高层欲借股权激励谋暴利否时间： 2011-07-19 09:10:00　来源： 人民网 饶媛媛　　发表评论>>
关键词： 湘电 股权激励 股份董事长 保加利亚 证据

内容摘要: 半年前，股民刘先生向《金融投资报》记者诉说了湘电集团和湘电股份(600416)在湘电风能转让一事上的久拖不决，5月18日，湘电股份发公告称，股东大会同意收购湘电风能49%的股权。”　对于录音中董事长周建雄提到的那个“净利润至少10个亿”的项目是否为湖南商务厅批示的保加利亚的项目的问题，李怡文回答：“欧洲那么大，不一定就是保加利亚。

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湘电股份：股权激励在推进

那么，湖南商务厅批示的那个湘电风能在保加利亚建设电场的项目是不是录音中湘电股份董事长周建雄所说的“净利润至少10亿”的项目？如果是，湘电股份为什么到现在还不发公告？其中的原因又是否如刘先生所猜测的，在股权激励推出之前尽量压低股价，以便在股价激励推出时让公司高层获利更多？

记者首先以投资者身份拨打了湘电股份证券部的电话。第一次打过去时，一位工作人员表示其证券代表不在，有什么问题可以向他提。于是，记者提到了湖南商务厅网站上湘电风能申请保加利亚建设电场的项目。

记者：“项目目前进展如何？”

工作人员：“保加利亚这个项目确实有，也在实施了，没披露是因为还没到披露阶段。因为这么大的项目有很多的程序要走。另外，这个项目之前决定的是由湘电风能来做前期的投产，但现在有可能要改为由湘电新能源来做前期的风场建设(湘电新能源，即录音中，湘电股份董事长周建雄提到的湘电集团注资20亿的全资子公司)。可以确定的是，不管前期的投产谁来做，这个风场的风机肯定完全是由湘电风能提供，估计利润有7个多亿，但这个最终的结果还没有出来。”

而对于其他问题，在得知记者的身份后，这位工作人员立即三缄其口。

记者几经辗转，终于联系到湘电股份证券代表李怡文，他的回答是：“公司的很多事情到了公告的时候自然会公告，目前还没有到披露时间，具体时间我不知道，董事长也不知道。因为有相关的程序要走，这里面有一个决策的过程，必须按照程序一步一步走。老实讲，我和湘电股份的董事长比你们、比投资者都还着急，因为这与股东的利益有关。所以，我只能说，这个项目还在推进中。”

对于录音中董事长周建雄提到的那个“净利润至少10个亿”的项目是否为湖南商务厅批示的保加利亚的项目的问题，李怡文回答：“欧洲那么大，不一定就是保加利亚。我目前还没有接到通知，无法回答这个问题。”

对于湘电股份不公告利好消息是否为了让公司高层在股权激励中获利最大化这一问题时，李怡文说：“我了解的情况是湘电集团有一个股权激励在推进，具体进展到什么情况我不清楚，而湘电股份目前还没有具体做决策的程序。可能前期有股东在决策，但我们现在也不知道。”

对于股民刘先生的猜测，李怡文说：“这个问题我不知道，我无法回答。”随即挂断了记者的电话。

“尽管湘电股份证券代表没有承认湖南商务厅批示的保加利亚项目就是录音中周建雄所说的‘净利润至少10个亿’的项目，但也没否认，包括股权激励的事情也并没有完全否定，但不公告‘利好’的原因很牵强。依我看，湘电股份现在就是想拖延时间，说不定不久后股权激励就出来了。而我们这些普通投资者暗地里却吃了大亏。”刘先生认为。

对此，《金融投资报》还将继续跟踪报道。

Appendix 2: FACW Permitting Detail

Appendix 2. FACW Permitting Detail

Project Permits Summary

Permits	Agency	Action	Submitted?	Approved?
Waterfront Development Permit	NJDEP - DLUR	Geotech/Placement of Buoy	Yes	Yes
NWP-5/NWP-6	USACOE	Geotech/Placement of Buoy	Yes	Yes
MMPA Letter of Concurrence	NOAA	Geotech/Placement of Buoy	Yes	Yes
Individual Multiple Permit Application	NJDEP - DLUR	Includes CAFRA, Waterfront Development, 401 Water Quality Certification for placement of turbines/cables	Yes	Yes
Tidelands License	NJDEP - DLUR	Covers placement of the cable in open waters	Yes	Yes
Green Acres	NJDEP	Allows for placement of the cable under the beach	Yes	Yes
Individual 404 Permit Application	USACOE	Federal permit for the placement of turbines and cables in open waters	Yes	No
MMPA Incidental Harassment Authorization	NOAA	Allows for incidental impacts to marine mammals and turtles during construction	No	No
FAA Clearance	FAA	Approval for construction of towers above 200 feet in height	Yes	Yes
Soil Erosion or Sediment Plan	Atl.County Soils Conservation	Covers soil erosion/sediment control activities for landward construction	No	No
Interconnection Application	PJM / ACE	Covers power connection to the grid	Yes	n.a.
ROW's / Utility Crossing Easements	DPW / DPU	Allows for placement of the cable landward of the transition vault to the terminus of the cable at the Huron substation.	Yes	No

Source:
Response to discovery question RCR-OP-1.

Status of Project Permits

Permits	Agency	Action	Submitted	Date Approved	Current Status
Waterfront Development Permit	NJDEP - DLUR	Geotech/Placement of Buoy	Yes	October 26, 2009	Expires October 26, 2014.
NWP-5/NWP-6	USACOE	Geotech/Placement of Buoy	Yes	April 14, 2010	Expires March 18, 2012.
MMPA Letter of Concurrence	NOAA	Geotech/Placement of Buoy	Yes	April 21, 2010	Good only for construction period for buoy and geotechnical activities.
Individual Multiple Permit Application	NJDEP - DLUR	Includes CAFRA, Waterfront Development, 401 Water Quality Certification for placement of turbines/cables	Yes	March 29, 2011	Expires March 29, 2016; No appeal possible once permit issued.
Tidelands License	NJDEP - DLUR	Covers placement of the cable in open waters	Yes	May 4, 2011	Tidelands council voted on May 4, 2011 to approve the lease arrangements for the new lease (turbine area covered by the turbine blades), and the utility license (covering the cable areas). No appeal possible once voted on by council.
Green Acres	NJDEP	Allows for placement of the cable under the beach at the foot of Tennessee Avenue	Yes	May 2, 2011	Variance approved by Green Acres for the placement of the cable under the beach at the head of Tennessee Avenue.

Status of Project Permits (continued)

Permits	Agency	Action	Submitted	Date Approved	Current Status
Individual 404 Permit Application	USACOE	Federal permit for the placement of turbines and cables in open waters	Yes	Est. Third Quarter 2011	• Application submitted to USACOE April 5, 2010; • Public notice issued on September 24, 2010 opening a 30 day comment period; • JPP meeting with agencies held on September 28, 2010 and December 8, 2010; • No negative comments received from the public; • Comments received by USFWS, NMFS, USEPA, and USCG; • Meeting held with USFWS on October 29, 2010 to discuss their comments; • Meeting held with NMFS on November 10, 2010 to discuss their comments; • Submissions in response to comments include a Benthic Evaluation Report, an Essential Fish Habitat Assessment, and a report on Threatened and/or Endangered Species species observed with the project area during the 24-month New Jersey Baseline Study. Comments on EFH report returned on March 29; • Report on avian and marine mammal/sea turtle resources identified for the project area during the 24-month New Jersey Baseline Study submitted April 6 with comments returned on April 8; • Report on findings from the first 8-months of preconstruction monitoring submitted April 11, along with avian and marine mammal risk assessments. • Report on findings of the 12-month preconstruction monitoring study submitted June 6, 2011; and • Comments received from USEPA on June 23, 2011 on the Conformity Analysis, response to be finalized July 2011.

Status of Project Permits (continued)

Permits	Agency	Action	Submitted	Date Approved	Current Status
MMPA Incidental Harassment Authorization	NOAA	Allows for incidental impacts to marine mammals and turtles during construction	No	Est. Third Quarter 2011	• Will be submitted July 2011; • Informed by NMFS that turn-around time on their part is 4 months.
FAA Clearance	FAA	Approval for construction of towers above 200 feet in height	Yes	March 16, 2011	September 12, 2012
Soil Erosion or Sediment Plan	Atlantic County Soils Conservation	Covers soil erosion/sediment control activities for landward construction	No	Est. Fourth Quarter 2011	• Relatively minor permit, experience with process shows that it takes a few weeks to gain approval; and • Exact upland construction/excavation areas are required before the application can be finalized. Permit application will be completed and submitted once the exact construction locations are finalized.
Interconnection Application	PJM / ACE	Covers power connection to the grid	Yes	N/A	• Applied in January 2008 for 20MW; • Completed two levels of engineering; • Applied for upgrade to 25MW on January 21, 2011; • On April 8, 2011, PJM issued a Feasibility/Impact study approval for W4-063, the PJM queue filing that Fishermen's made for the 5MW incremental generation that is planned to be added to the Huron interconnection that we had applied for under queue position U2-045 (applied for 20MW). PJM determined that the increment posed no overloads and would be combining the 5MW with the 20MW when PJM finalizes the Facilities Study (step 3 of the PJM process) for U2-045. • This is not appealable.
ROW's / Utility Crossing Easements	DPW / DPU	Allows for placement of the cable landward of the transition vault to the terminus of the cable at the Huron substation.	Yes	Est. Third Quarter of 2011	• Draft Easement Agreement currently under review by the Solicitor of Atlantic City.

Source:
Response to discovery question RCR-OP-1.

Appendix 3: FACW Cost Modeling Detail

Overnight Cost Calculations

Wind Farm	Nation	Overnight Cost	Cost per Capacity	Year Constructed	Capacity (MW)	Depth (m)	Turbine size (MW)	Number of Turbines	Distance to shore (km)	Water Depth min(feet)	Water Depth Max (feet)
Vindeby	Denmark	$ 31,240,420	$ 6,248,084	1991	5	3.5	0.45	11	1.8	2	4
Lely	Netherlands	$ 14,048,125	$ 7,024,063	1994	2	7.5	0.5	4	0.8	3	4
Tuno Knob	Denmark	$ 29,925,347	$ 5,985,069	1995	5	4	0.5	10	5.5	4	7
Bockstigen	Sweden	$ 4,825,791	$ 1,608,597	1998	3	6	0.55	5	4	5	6
Blyth	UK	$ 9,358,191	$ 2,339,548	2000	4	8.5	2	2	1	5	5
Middlegruden	Denmark	$ 61,508,870	$ 1,537,722	2001	40	6	2	20	2	3	6
Utgunden	Sweden	$ 25,269,262	$ 2,526,926	2001	10	8.6	1.425	7	4.2	6	15
Yttre Stengrund	Sweden	$ 17,021,717	$ 1,702,172	2001	10	8	2	5	2	6	8
Horns Rev	Denmark	$ 364,604,995	$ 2,278,781	2002	160	10	2	80	14	6	11
Nysted	Denmark	$ 306,965,786	$ 1,942,821	2003	158	7.75	2.3	72	10	6	9
Samso	Denmark	$ 46,044,744	$ 2,001,945	2003	23	20	2.3	10	3.5	10	13
North Hoyle	UK	$ 177,049,179	$ 2,950,820	2003	60	12	2	30	7	5	12
Scoby Sands	UK	$ 177,752,699	$ 2,962,545	2004	60	16.5	2	30	2.5	0	8
Kentish Flats	UK	$ 229,375,615	$ 2,548,618	2005	90	5	3	30	10	3	5
Barow	UK	$ 289,636,694	$ 3,218,185	2006	90	17.5	3	30	7.5	12	16
Egmond aan Zee	Netherlands	$ 283,536,230	$ 2,625,335	2006	108	18	3	36	10	15	18
Burbo Bank	UK	$ 263,955,202	$ 2,932,836	2007	90	5	3.6	25	6.5	0	6
Beatrice	UK	$ 74,545,546	$ 7,454,555	2007	10	45	5	2	22	45	45
Lillgrund	Sweden	$ 288,478,950	$ 2,622,536	2007	110	7	2.3	48	10	4	13
Lynn/Inner Downsing	UK	$ 548,801,645	$ 5,657,749	2009	97	9.5	3.6	27	5	7	11
Robin Rigg	UK	$ 724,500,875	$ 4,025,005	2009	180	5	3	60	9	0	12
Irene Vorrink	Netherlands	$ 56,908,116	$ 3,347,536	1996	17	2.5	0.6	28	0	2	3
Prinses Amaliawindpar	Netherlands	$ 509,870,668	$ 4,248,922	2008	120	21.5	2	60	23	19	24
Rhyl Flats	UK	$ 308,288,847	$ 3,425,432	2009	90	7.5	3.6	25	10.7	4	11
Gunfleet Sands	UK	$ 464,162,305	$ 2,683,019	2009	173	6.5	3.6	48	7	0	13
Horns Rev 2	Denmark	$ 653,360,991	$ 3,126,129	2009	209	13	2.3	91	31.7	9	17
EnBW Baltic I	Germany	$ 256,122,319	$ 5,335,882	2010	48	17.5	2.3	21	16	16	19
Thanet	UK	$ 1,341,530,589	$ 4,471,769	2010	300	18.5	3	100	12	14	23
Belwind Phase 1	Belgium	$ 793,530,762	$ 4,809,277	2010	165	22.5	3	55	46	15	30
Greater Gabbard	UK	$ 2,254,757,885	$ 4,473,726	2010	504	20.5	3.6	140	36	4	37
Sheringham Shoal	UK	$ 1,648,869,870	$ 5,201,482	2011	317	18.5	3.6	88	23	14	23
Walney Phase 1	UK	$ 1,482,799,371	$ 8,058,692	2011	184	21	3.6	51	14	19	23
FACW	USA			2011	25	70	4	6	4.5	0	0

Overnight Cost Calculations

Wind Farm	Nation	Cost from source	Year Constructed	Conversion	Overnight Cost	Cost in USD	Overnight Cost in USD 2009	CPI	2009 CPI
Vindeby	Denmark	7.18 million pounds	1991	1.767	$ 7,124,316	$ 12,591,187	$ 19,833,153	136.20	214.54
Lely	Netherlands	4.4 million pounds	1994	1.532	$ 4,376,162	$ 6,703,635	$ 9,704,303	148.20	214.54
Tuno Knob	Denmark	9.75 million pounds	1995	1.556	$ 9,704,389	$ 15,100,966	$ 21,257,978	152.40	214.54
Bockstigen	Sweden	4 million euro	1997	1.065	$ 2,535,420	$ 2,700,935	$ 3,610,283	160.50	214.54
Blyth	UK	4 million pounds	2000	1.516	$ 3,977,647	$ 6,029,118	$ 7,511,434	172.20	214.54
Middlegruden	Denmark	47 million euro	2001	0.895	$ 46,815,770	$ 41,915,096	$ 50,775,488	177.10	214.54
Utgunden	Sweden	12 million pounds	2001	1.440	$ 11,958,449	$ 17,219,688	$ 20,859,741	177.10	214.54
Yttre Stengrund	Sweden	13 million euro	2001	0.895	$ 12,955,608	$ 11,599,415	$ 14,051,404	177.10	214.54
Horns Rev	Denmark	272 million euro	2002	0.945	$ 271,225,003	$ 256,377,870	$ 305,739,516	179.90	214.54
Nysted	Denmark	200 million euro	2003	1.132	$ 199,463,092	$ 225,798,583	$ 263,272,557	184.00	214.54
Samso	Denmark	30 million euro	2003	1.132	$ 29,919,383	$ 33,869,696	$ 39,490,777	184.00	214.54
North Hoyle	UK	80 million pounds	2003	1.635	$ 79,670,469	$ 130,234,233	$ 151,848,161	184.00	214.54
Scoby Sands	UK	75.54 million pounds	2004	1.833	$ 75,183,352	$ 137,808,407	$ 156,511,394	188.90	214.54
Kentish Flats	UK	105 million pounds	2005	1.820	$ 104,430,747	$ 190,084,772	$ 208,808,073	195.30	214.54
Barow	UK	139.5 million pounds	2006	1.843	$ 138,737,879	$ 255,758,591	$ 272,171,035	201.60	214.54
Egmond aan Zee	Netherlands	200 million euro	2006	1.256	$ 199,319,010	$ 250,371,684	$ 266,438,442	201.60	214.54
Burbo Bank	UK	181 million euro	2007	1.371	$ 179,822,063	$ 246,547,377	$ 255,102,847	207.34	214.54
Beatrice	UK	35 million pounds	2007	2.002	$ 34,781,090	$ 69,629,273	$ 72,045,487	207.34	214.54
Lillgrund	Sweden	197 million euro	2007	1.371	$ 196,529,106	$ 269,453,785	$ 278,804,134	207.34	214.54
Lynn/Inner Downsing	UK	300 million pounds	2008	1.854	$ 298,055,623	$ 552,727,611	$ 550,761,130	215.30	214.54
Robin Rigg	UK	396 million pounds	2008	1.854	$ 393,478,339	$ 729,683,743	$ 727,087,691	215.30	214.54
Irene Vorrink	Netherlands	19.55 million pounds	1996	1.561	$ 19,503,269	$ 30,437,970	$ 41,619,317	156.90	214.54
Prinses Amaliawindpar	Netherlands	350 million euros	2008	1.473	$ 348,701,365	$ 513,518,134	$ 511,691,151	215.30	214.54
Rhyl Flats	UK	198 million pounds	2009	1.566	$ 196,859,902	$ 308,288,847	$ 308,288,847	214.54	214.54
Gunfleet Sands	UK	297.5 million pounds	2009	1.566	$ 296,393,940	$ 464,162,305	$ 464,162,305	214.54	214.54
Horns Rev 2	Denmark	470 million Euros	2009	1.394	$ 468,852,588	$ 653,360,991	$ 653,360,991	214.54	214.54
EnBW Baltic I	Germany	200 million euro	2010	1.326	$ 199,500,451	$ 264,593,458	$ 260,323,434	218.06	214.54
Thanet	UK	900 million pounds	2010	1.546	$ 896,721,648	$ 1,385,901,151	$ 1,363,535,400	218.06	214.54
Belwind Phase 1	Belgium	620 million euro	2010	1.326	$ 618,102,104	$ 819,776,459	$ 806,546,860	218.06	214.54
Greater Gabbard	UK	1512 million pounds	2010	1.546	$ 1,507,151,772	$ 2,329,333,056	$ 2,291,742,148	218.06	214.54
Sheringham Shoal	UK	10 billion NKr	2011	0.180	$ 9,968,327,083	$ 1,791,099,641	$ 1,718,513,960	223.60	214.54
Walney Phase 1	UK	1000 million pounds	2011	1.616	$ 996,836,568	$ 1,610,704,077	$ 1,545,429,064	223.60	214.54
FACW	USA			1.000				223.60	214.54

Overnight Cost Calculations

Wind Farm	Nation	CPI Ratio	Source
Vindeby	Denmark	1.58	http://www.4coffshore.com/windfarms/ravnsborg-denmark-dk06.html
Lely	Netherlands	1.45	http://www.4coffshore.com/windfarms/lely-netherlands-nl27.html
Tuno Knob	Denmark	1.41	http://www.4coffshore.com/windfarms/tuno-knob-denmark-dk05.html
Bockstigen	Sweden	1.34	http://www.4coffshore.com/windfarms/bockstigen-sweden-se02.html
Blyth	UK	1.25	http://www.4coffshore.com/windfarms/bly--united-kingdom-uk45.html
Middlegruden	Denmark	1.21	http://www.4coffshore.com/windfarms/kobenhavn-denmark-dk08.html
Utgunden	Sweden	1.21	http://www.4coffshore.com/windfarms/utgrunden-i-sweden-se03.html
Yttre Stengrund	Sweden	1.21	http://www.4coffshore.com/windfarms/yttre-stengrund-sweden-se04.html
Horns Rev	Denmark	1.19	http://www.4coffshore.com/windfarms/horns-rev-1-denmark-dk03.html
Nysted	Denmark	1.17	http://www.4coffshore.com/windfarms/nysted-denmark-dk07.html
Samso	Denmark	1.17	http://www.4coffshore.com/windfarms/samsoe-palludans-flak-denmark-dk01.html
North Hoyle	UK	1.17	http://www.4coffshore.com/windfarms/north-hoyle-united-kingdom-uk16.html
Scoby Sands	UK	1.14	http://www.4coffshore.com/windfarms/scroby-sands-united-kingdom-uk23.html
Kentish Flats	UK	1.10	http://www.4coffshore.com/windfarms/kentish-flats-united-kingdom-uk12.html
Barow	UK	1.06	http://www.4coffshore.com/windfarms/Barrow-United-Kingdom-UK01.html
Egmond aan Zee	Netherlands	1.06	http://www.4coffshore.com/windfarms/offshore-windpark-egmond-aan-zee-netherlands-nl02.html
Burbo Bank	UK	1.03	http://www.4coffshore.com/windfarms/burbo-bank-united-kingdom-uk02.html
Beatrice	UK	1.03	http://www.4coffshore.com/windfarms/beatrice-demonstration-united-kingdom-uk46.html
Lillgrund	Sweden	1.03	http://www.4coffshore.com/windfarms/lillgrund-sweden-se05.html
Lynn/Inner Downsing	UK	1.00	http://www.4coffshore.com/windfarms/lynn-united-kingdom-uk15.html
Robin Rigg	UK	1.00	http://www.4coffshore.com/windfarms/robin-rigg-united-kingdom-uk20.html
Irene Vorrink	Netherlands	1.37	http://www.4coffshore.com/windfarms/irene-vorrink-netherlands-nl28.html
Prinses Amaliawindpar	Netherlands	1.00	http://www.4coffshore.com/windfarms/prinses-amaliawindpark-wind-farm-netherlands-nl01.html
Rhyl Flats	UK	1.00	http://www.4coffshore.com/windfarms/rhyl-flats-united-kingdom-uk19.html
Gunfleet Sands	UK	1.00	http://www.4coffshore.com/windfarms/gunfleet-sands-united-kingdom-uk07.html
Horns Rev 2	Denmark	1.00	http://www.4coffshore.com/windfarms/horns-rev-2-denmark-dk10.html
EnBW Baltic I	Germany	0.98	http://www.4coffshore.com/windfarms/enbw-baltic-1-germany-de78.html
Thanet	UK	0.98	http://www.4coffshore.com/windfarms/thanet-united-kingdom-uk29.html
Belwind Phase 1	Belgium	0.98	http://www.4coffshore.com/windfarms/belwind-phase-1-belgium-be03.html
Greater Gabbard	UK	0.98	http://www.4coffshore.com/windfarms/greater-gabbard-united-kingdom-uk05.html
Sheringham Shoal	UK	0.96	http://www.4coffshore.com/windfarms/sheringham-shoal-united-kingdom-uk27.html
Walney Phase 1	UK	0.96	http://www.4coffshore.com/windfarms/windfarms.aspx?windfarmId=UK31
FACW	USA	0.96	

Statistical Results

Linear regression

Number of observations	32
F(2, 29) = 221.73	222.21
Prob > F =	0.0000
R-squared	0.9019
Root MSE	181.36

Cost	Coefficient	Robust Standard Error	t	P>|t|	95% Confidence Interval	
Capacity (MW)	7.637047	1.145249	6.67	0.000	5.294749	9.979345
Number of Turbines	-10.32281	3.448929	-2.99	0.006	(17.376660)	(3.268960)
Constant	9.000587	38.47837	0.23	0.817	(69.696520)	87.697690

Wind Farm	Nation	Year Constructed	Capacity (MW)	Depth (m)	Turbine size (MW)	Number of Turbines	Distance to shore (km)	Cost	Water depth	Predicted Cost	CPI 2009
Vindeby	Denmark	1991	5	3.5	0.45	11	1.8	19.83	3.00	(66.27)	214.54
Lely	Netherlands	1994	2	7.5	0.5	4	0.8	9.70	3.50	(16.66)	214.54
Tuno Knob	Denmark	1995	5	4	0.5	10	5.5	21.26	5.50	(55.90)	214.54
Bockstigen	Sweden	1998	3	6	0.55	5	4	3.61	5.50	(19.37)	214.54
Blyth	UK	2000	4	8.5	2	2	1	7.51	5.00	19.42	214.54
Middlegruden	Denmark	2001	40	6	2	20	2	50.78	4.50	108.68	214.54
Utgunden	Sweden	2001	10	8.6	1.425	7	4.2	20.86	10.50	13.55	214.54
Yttre Stengrund	Sweden	2001	10	8	2	5	2	14.05	7.00	34.30	214.54
Horns Rev	Denmark	2002	160	10	2	80	14	305.74	8.50	406.23	214.54
Nysted	Denmark	2003	158	7.75	2.3	72	10	263.27	7.50	473.89	214.54
Samso	Denmark	2003	23	20	2.3	10	3.5	39.49	11.50	82.09	214.54
North Hoyle	UK	2003	60	12	2	30	7	151.85	8.50	158.28	214.54
Scoby Sands	UK	2004	60	16.5	2	30	2.5	156.51	4.00	158.28	214.54
Kentish Flats	UK	2005	90	5	3	30	10	208.81	4.00	388.27	214.54
Barow	UK	2006	90	17.5	3	30	7.5	272.17	14.00	388.27	214.54
Egmond aan Zee	Netherlands	2006	108	18	3	36	10	266.44	16.50	464.02	214.54
Burbo Bank	UK	2007	90	5	3.6	25	6.5	255.10	3.00	440.13	214.54
Beatrice	UK	2007	10	45	5	2	22	72.05	45.00	65.42	214.54
Lillgrund	Sweden	2007	110	7	2.3	48	10	278.80	8.50	354.87	214.54
Lynn/Inner Downsing	UK	2009	97	9.5	3.6	27	5	550.76	9.00	473.05	214.54
Robin Rigg	UK	2009	180	5	3	60	9	727.09	6.00	767.03	214.54
Irene Vorrink	Netherlands	1996	17	2.5	0.6	28	0	41.62	2.50	(150.63)	214.54
Prinses Amaliawindpark	Netherlands	2008	120	21.5	2	60	23	511.69	21.50	307.05	214.54
Rhyl Flats	UK	2009	90	7.5	3.6	25	10.7	308.29	7.50	440.13	214.54
Gunfleet Sands	UK	2009	173	6.5	3.6	48	7	464.16	6.50	837.85	214.54
Horns Rev 2	Denmark	2009	209	13	2.3	91	31.7	653.36	13.00	667.77	214.54
EnBW Baltic I	Germany	2010	48	17.5	2.3	21	16	260.32	17.50	159.64	214.54
Thanet	UK	2010	300	18.5	3	100	12	1,363.54	18.50	1,272.05	214.54
Belwind Phase 1	Belgium	2010	165	22.5	3	55	46	806.55	22.50	703.90	214.54
Greater Gabbard	UK	2010	504	20.5	3.6	140	36	2,291.74	20.50	2,421.04	214.54
Sheringham Shoal	UK	2011	317	18.5	3.6	88	23	1,718.51	18.50	1,526.86	214.54
Walney Phase 1	UK	2011	184	21	3.6	51	14	1,545.43	21.00	891.06	214.54
FACW	USA	2011	25	70	4	6	4.5		10.41		214.54

Wind Farm	Nation	CPI 2011	Price Change	Cost 2011	Predicted Cost
Vindeby	Denmark	223.60	1.04	20.67	(66.37)
Lely	Netherlands	223.60	1.04	10.11	(17.02)
Tuno Knob	Denmark	223.60	1.04	22.16	(56.04)
Bockstigen	Sweden	223.60	1.04	3.76	(19.70)
Blyth	UK	223.60	1.04	7.83	18.90
Middlegruden	Denmark	223.60	1.04	52.92	108.03
Utgunden	Sweden	223.60	1.04	21.74	13.11
Yttre Stengrund	Sweden	223.60	1.04	14.64	33.76
Horns Rev	Denmark	223.60	1.04	318.65	405.10
Nysted	Denmark	223.60	1.04	274.39	472.41
Samso	Denmark	223.60	1.04	41.16	81.42
North Hoyle	UK	223.60	1.04	158.26	157.54
Scoby Sands	UK	223.60	1.04	163.12	157.54
Kentish Flats	UK	223.60	1.04	217.63	386.65
Barow	UK	223.60	1.04	283.67	386.65
Egmond aan Zee	Netherlands	223.60	1.04	277.69	462.18
Burbo Bank	UK	223.60	1.04	265.88	438.26
Beatrice	UK	223.60	1.04	75.09	64.73
Lillgrund	Sweden	223.60	1.04	290.58	353.58
Lynn/Inner Downsing	UK	223.60	1.04	574.02	471.08
Robin Rigg	UK	223.60	1.04	757.80	764.30
Irene Vorrink	Netherlands	223.60	1.04	43.38	(150.21)
Prinses Amaliawindpark	Netherlands	223.60	1.04	533.30	306.08
Rhyl Flats	UK	223.60	1.04	321.31	438.26
Gunfleet Sands	UK	223.60	1.04	483.77	834.71
Horns Rev 2	Denmark	223.60	1.04	680.96	665.77
EnBW Baltic I	Germany	223.60	1.04	271.32	158.80
Thanet	UK	223.60	1.04	1,421.12	1,267.83
Belwind Phase 1	Belgium	223.60	1.04	840.61	701.36
Greater Gabbard	UK	223.60	1.04	2,388.53	2,412.88
Sheringham Shoal	UK	223.60	1.04	1,791.10	1,521.54
Walney Phase 1	UK	223.60	1.04	1,610.70	887.75
FACW	USA	223.60	1.04		

Appendix 4: FACW Pro Forma Detail

REDACTED

Identified by FACW as Privileged and Confidential

Appendix 5: FACW Revised Rate Impact Detail

REDACTED

Identified by FACW as Privileged and Confidential

Appendix 6: FACW Revised Net Economic Benefit Detail

Impacts and Multipliers

Impact Type	Employment	Labor Income	Value Added	Output	Multiplier Employment	Multiplier Labor Income	Multiplier Value Added	Multiplier Output
OREC - Individual								
Direct Effect	133.9	$ 976,103	$ 976,103	$ 1,000,000	0.0001339	0.9761030	0.9761030	1.0000000
Indirect Effect	-	$ -	$ -	$ -	-	-	-	-
Induced Effect	5.1	$ 300,457	$ 509,955	$ 818,206	0.0000051	0.3004570	0.5099550	0.8182060
Total Effect	139.0	$ 1,276,561	$ 1,486,058	$ 1,818,206	0.0001390	1.2765610	1.4860580	1.8182060
OREC - Commercial								
Direct Effect	6.6	$ 383,646	$ 657,097	$ 1,000,000	0.0000066	0.3836460	0.6570970	1.0000000
Indirect Effect	2.3	$ 135,699	$ 228,045	$ 363,632	0.0000023	0.1356990	0.2280450	0.3636320
Induced Effect	2.7	$ 161,248	$ 273,652	$ 438,937	0.0000027	0.1612480	0.2736520	0.4389370
Total Effect	11.6	$ 680,594	$ 1,158,794	$ 1,802,569	0.0000116	0.6805940	1.1587940	1.8025690
OREC - Industrial								
Direct Effect	1.6	$ 163,918	$ 309,758	$ 1,000,000	0.0000016	0.1639180	0.3097580	1.0000000
Indirect Effect	2.0	$ 125,725	$ 220,202	$ 414,218	0.0000020	0.1257250	0.2202020	0.4142180
Induced Effect	1.5	$ 89,722	$ 152,270	$ 244,260	0.0000015	0.0897220	0.1522700	0.2442600
Total Effect	5.1	$ 379,364	$ 682,230	$ 1,658,478	0.0000051	0.3793640	0.6822300	1.6584780
Tourism								
Direct Effect	9.6	$ 368,936	$ 586,706	$ 1,000,000	0.0000096	0.3689360	0.5867060	1.0000000
Indirect Effect	1.8	$ 69,134	$ 123,692	$ 202,385	0.0000018	0.0691340	0.1236920	0.2023850
Induced Effect	2.0	$ 86,169	$ 152,894	$ 238,232	0.0000020	0.0861690	0.1528940	0.2382320
Total Effect	13.4	$ 524,239	$ 863,292	$ 1,440,617	0.0000134	0.5242390	0.8632920	1.4406170
Construction								
Direct Effect	51.9	$ 3,705,298	$ 5,364,094	$ 9,496,817	0.0000519	3.7052980	5.3640940	9.4968170
Indirect Effect	18.2	$ 1,244,952	$ 1,890,057	$ 3,422,381	0.0000182	1.2449520	1.8900570	3.4223810
Induced Effect	26.1	$ 1,336,559	$ 2,424,812	$ 3,898,604	0.0000261	1.3365590	2.4248120	3.8986040
Total Effect	96.2	$ 6,286,809	$ 9,678,964	$ 16,817,803	0.0000962	6.2868090	9.6789640	16.8178030
O&M								
Direct Effect	0.3	$ 48,471	$ 155,989	$ 218,257	0.0000003	0.0484710	0.1559890	0.2182570
Indirect Effect	0.3	$ 18,389	$ 29,211	$ 53,731	0.0000003	0.0183890	0.0292110	0.0537310
Induced Effect	0.4	$ 17,978	$ 32,605	$ 52,438	0.0000004	0.0179780	0.0326050	0.0524380
Total Effect	1.0	$ 84,838	$ 217,806	$ 324,425	0.0000010	0.0848380	0.2178060	0.3244250

Economic Impacts of Rates – Output

The FACW project will lead to considerable rate increases, which in turn, reduce disposable income for households and profits for business and industry. These income/profit reductions will have negative effects on the New Jersey economy.

Increases in rates created by the FACW OREC proposal will lead to a reduction in New Jersey economic activity of between $27 million to $64 million per year. In total, the New Jersey economy will see a reduction of some $946 million in economic activity, or of some $506 million in NPV terms.

Year	Economic Impact (Rates) - Output															
	Residential Rates				Commercial Rates				Industrial Rates				Total Rate Impact			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
	(million $)															
2013	$ (5.49)	$ -	$ (4.49)	$ (9.98)	$ (7.97)	$ (2.90)	$ (3.50)	$ (14.36)	$ (1.62)	$ (0.67)	$ (0.40)	$ (2.69)	$ (15.08)	$ (3.57)	$ (8.38)	$ (27.03)
2014	(7.11)	-	(5.81)	(12.92)	(10.39)	(3.78)	(4.56)	(18.66)	(2.10)	(0.87)	(0.51)	(3.48)	(19.59)	(4.64)	(10.89)	(35.06)
2015	(7.38)	-	(6.03)	(13.41)	(10.85)	(3.94)	(4.76)	(19.43)	(2.17)	(0.90)	(0.53)	(3.60)	(20.40)	(4.84)	(11.33)	(36.44)
2016	(7.61)	-	(6.23)	(13.83)	(11.26)	(4.10)	(4.94)	(20.11)	(2.24)	(0.93)	(0.55)	(3.71)	(21.11)	(5.02)	(11.72)	(37.66)
2017	(7.84)	-	(6.41)	(14.25)	(11.68)	(4.25)	(5.13)	(20.79)	(2.31)	(0.95)	(0.56)	(3.82)	(21.82)	(5.20)	(12.10)	(38.87)
2018	(8.09)	-	(6.62)	(14.71)	(12.13)	(4.41)	(5.32)	(21.53)	(2.38)	(0.98)	(0.58)	(3.94)	(22.60)	(5.40)	(12.52)	(40.18)
2019	(8.36)	-	(6.84)	(15.21)	(12.63)	(4.59)	(5.54)	(22.34)	(2.45)	(1.02)	(0.60)	(4.07)	(23.44)	(5.61)	(12.99)	(41.62)
2020	(8.63)	-	(7.06)	(15.68)	(13.10)	(4.76)	(5.75)	(23.11)	(2.53)	(1.05)	(0.62)	(4.19)	(24.26)	(5.81)	(13.43)	(42.99)
2021	(8.89)	-	(7.28)	(16.17)	(13.60)	(4.95)	(5.97)	(23.91)	(2.61)	(1.08)	(0.64)	(4.32)	(25.10)	(6.02)	(13.88)	(44.40)
2022	(9.19)	-	(7.52)	(16.70)	(14.14)	(5.14)	(6.21)	(24.78)	(2.69)	(1.11)	(0.66)	(4.46)	(26.01)	(6.25)	(14.38)	(45.94)
2023	(9.47)	-	(7.75)	(17.22)	(14.67)	(5.33)	(6.44)	(25.64)	(2.77)	(1.15)	(0.68)	(4.59)	(26.91)	(6.48)	(14.87)	(47.45)
2024	(9.79)	-	(8.01)	(17.79)	(15.26)	(5.55)	(6.70)	(26.58)	(2.86)	(1.18)	(0.70)	(4.74)	(27.90)	(6.73)	(15.40)	(49.11)
2025	(10.13)	-	(8.29)	(18.42)	(15.90)	(5.78)	(6.98)	(27.61)	(2.96)	(1.22)	(0.72)	(4.90)	(28.98)	(7.00)	(15.99)	(50.93)
2026	(10.46)	-	(8.56)	(19.02)	(16.52)	(6.01)	(7.25)	(28.61)	(3.05)	(1.26)	(0.74)	(5.06)	(30.03)	(7.27)	(16.56)	(52.69)
2027	(10.81)	-	(8.84)	(19.65)	(17.18)	(6.25)	(7.54)	(29.65)	(3.15)	(1.30)	(0.77)	(5.22)	(31.13)	(7.55)	(17.15)	(54.52)
2028	(11.15)	-	(9.12)	(20.27)	(17.84)	(6.49)	(7.83)	(30.71)	(3.24)	(1.34)	(0.79)	(5.38)	(32.23)	(7.83)	(17.74)	(56.36)
2029	(11.47)	-	(9.39)	(20.86)	(18.48)	(6.72)	(8.11)	(31.71)	(3.33)	(1.38)	(0.81)	(5.53)	(33.28)	(8.10)	(18.31)	(58.10)
2030	(11.85)	-	(9.69)	(21.54)	(19.20)	(6.98)	(8.43)	(32.85)	(3.44)	(1.42)	(0.84)	(5.70)	(34.48)	(8.41)	(18.96)	(60.09)
2031	(12.21)	-	(9.99)	(22.20)	(19.92)	(7.24)	(8.74)	(33.98)	(3.54)	(1.47)	(0.86)	(5.87)	(35.66)	(8.71)	(19.60)	(62.04)
2032	(12.58)	-	(10.29)	(22.88)	(20.66)	(7.51)	(9.07)	(35.14)	(3.64)	(1.51)	(0.89)	(6.04)	(36.88)	(9.02)	(20.25)	(64.06)
2033	$ (0.11)	$ -	$ (0.09)	$ (0.20)	$ (0.18)	$ (0.07)	$ (0.08)	$ (0.31)	$ (0.03)	$ (0.01)	$ (0.01)	$ (0.05)	$ (0.33)	$ (0.08)	$ (0.18)	$ (0.57)
Total	**$ (188.60)**	**$ -**	**$ (154.32)**	**$ (342.92)**	**$ (293.53)**	**$ (106.74)**	**$ (128.84)**	**$ (511.81)**	**$ (55.09)**	**$ (22.82)**	**$ (13.46)**	**$ (91.37)**	**$ (537.23)**	**$ (129.56)**	**$ (296.62)**	**$ (946.10)**
NPV	**$ (101.18)**	**$ -**	**$ (82.79)**	**$ (183.97)**	**$ (155.56)**	**$ (56.57)**	**$ (68.28)**	**$ (272.80)**	**$ (29.61)**	**$ (12.27)**	**$ (7.23)**	**$ (49.11)**	**$ (286.35)**	**$ (68.83)**	**$ (158.30)**	**$ (505.88)**

Economic Impacts of Rates – Jobs

The FACW project will lead to considerable rate increases, which in turn, reduce economic activity and employment opportunities.

Increases in rates created by the FACW OREC proposal will lead to a reduction in New Jersey employment of 864 to 2000 jobs per year. In total, the rate increases created by the FACW OREC proposal will likely lead to a cumulative employment loss of almost 30,000 jobs-years.

Year	Economic Impact (Rates) - Jobs															
	Residential Rates				Commercial Rates				Industrial Rates				Total Rate Impact			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
	(number of jobs)															
2013	(735)	-	(28)	(763)	(53)	(18)	(22)	(92)	(3)	(3)	(2)	(8)	(790)	(22)	(52)	(864)
2014	(952)	-	(36)	(988)	(69)	(24)	(28)	(120)	(3)	(4)	(3)	(11)	(1,023)	(28)	(67)	(1,119)
2015	(988)	-	(38)	(1,025)	(72)	(25)	(29)	(126)	(3)	(4)	(3)	(11)	(1,063)	(29)	(70)	(1,162)
2016	(1,019)	-	(39)	(1,058)	(74)	(26)	(30)	(131)	(4)	(4)	(3)	(11)	(1,097)	(30)	(73)	(1,200)
2017	(1,050)	-	(40)	(1,090)	(77)	(27)	(32)	(135)	(4)	(5)	(3)	(12)	(1,130)	(31)	(75)	(1,237)
2018	(1,083)	-	(41)	(1,124)	(80)	(28)	(33)	(141)	(4)	(5)	(4)	(12)	(1,167)	(33)	(78)	(1,277)
2019	(1,120)	-	(43)	(1,163)	(83)	(29)	(34)	(146)	(4)	(5)	(4)	(13)	(1,207)	(34)	(80)	(1,322)
2020	(1,155)	-	(44)	(1,199)	(86)	(30)	(35)	(152)	(4)	(5)	(4)	(13)	(1,246)	(35)	(83)	(1,364)
2021	(1,191)	-	(45)	(1,236)	(90)	(31)	(37)	(158)	(4)	(5)	(4)	(13)	(1,285)	(36)	(86)	(1,407)
2022	(1,230)	-	(47)	(1,277)	(93)	(33)	(38)	(164)	(4)	(5)	(4)	(14)	(1,328)	(38)	(89)	(1,455)
2023	(1,268)	-	(48)	(1,317)	(97)	(34)	(40)	(170)	(4)	(6)	(4)	(14)	(1,369)	(39)	(92)	(1,501)
2024	(1,310)	-	(50)	(1,360)	(101)	(35)	(41)	(177)	(5)	(6)	(4)	(15)	(1,416)	(41)	(95)	(1,552)
2025	(1,356)	-	(52)	(1,408)	(105)	(37)	(43)	(184)	(5)	(6)	(4)	(15)	(1,466)	(42)	(99)	(1,608)
2026	(1,401)	-	(53)	(1,454)	(109)	(38)	(45)	(192)	(5)	(6)	(5)	(16)	(1,515)	(44)	(103)	(1,661)
2027	(1,447)	-	(55)	(1,502)	(113)	(40)	(46)	(199)	(5)	(6)	(5)	(16)	(1,565)	(46)	(106)	(1,717)
2028	(1,493)	-	(57)	(1,550)	(118)	(41)	(48)	(207)	(5)	(6)	(5)	(17)	(1,616)	(48)	(110)	(1,773)
2029	(1,536)	-	(59)	(1,595)	(122)	(42)	(50)	(214)	(5)	(7)	(5)	(17)	(1,664)	(49)	(113)	(1,826)
2030	(1,586)	-	(60)	(1,647)	(127)	(44)	(52)	(223)	(6)	(7)	(5)	(18)	(1,718)	(51)	(117)	(1,887)
2031	(1,635)	-	(62)	(1,697)	(131)	(46)	(54)	(231)	(6)	(7)	(5)	(18)	(1,772)	(53)	(121)	(1,946)
2032	(1,685)	-	(64)	(1,749)	(136)	(48)	(56)	(240)	(6)	(7)	(5)	(19)	(1,827)	(55)	(125)	(2,007)
2033	(15)	-	(1)	(16)	(1)	(0)	(0)	(2)	(0)	(0)	(0)	(0)	(16)	(0)	(1)	(18)
Total	**(25,254)**	**-**	**(962)**	**(26,216)**	**(1,937)**	**(675)**	**(793)**	**(3,405)**	**(88)**	**(110)**	**(83)**	**(281)**	**(27,280)**	**(785)**	**(1,837)**	**(29,902)**

Economic Impacts of Rates – Wages

The FACW project will lead to considerable rate increases, which in turn, will reduce economic activity, employment opportunities, and wages.

Increases in rates created by the FACW OREC proposal will lead to a reduction in $13 million to $31 million per year in wages for New Jersey workers, or a cumulative total wage reduction of $246 million (NPV).

Year	Economic Impact (Rates) - Wages															
	Residential Rates				Commercial Rates				Industrial Rates				Total Rate Impact			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
	(million $)															
2013	$ (5.36)	$ -	$ (1.65)	$ (7.01)	$ (3.06)	$ (1.08)	$ (1.28)	$ (5.42)	$ (0.27)	$ (0.20)	$ (0.15)	$ (0.61)	$ (8.68)	$ (1.28)	$ (3.08)	$ (13.04)
2014	(6.94)	-	(2.14)	(9.07)	(3.98)	(1.41)	(1.67)	(7.07)	(0.34)	(0.26)	(0.19)	(0.80)	(11.26)	(1.67)	(4.00)	(16.94)
2015	(7.20)	-	(2.22)	(9.42)	(4.16)	(1.47)	(1.75)	(7.38)	(0.36)	(0.27)	(0.19)	(0.82)	(11.72)	(1.75)	(4.16)	(17.62)
2016	(7.43)	-	(2.29)	(9.71)	(4.32)	(1.53)	(1.82)	(7.67)	(0.37)	(0.28)	(0.20)	(0.85)	(12.11)	(1.81)	(4.30)	(18.23)
2017	(7.65)	-	(2.36)	(10.01)	(4.48)	(1.59)	(1.88)	(7.95)	(0.38)	(0.29)	(0.21)	(0.87)	(12.51)	(1.87)	(4.45)	(18.83)
2018	(7.90)	-	(2.43)	(10.33)	(4.65)	(1.65)	(1.96)	(8.26)	(0.39)	(0.30)	(0.21)	(0.90)	(12.94)	(1.94)	(4.60)	(19.48)
2019	(8.16)	-	(2.51)	(10.68)	(4.84)	(1.71)	(2.04)	(8.59)	(0.40)	(0.31)	(0.22)	(0.93)	(13.41)	(2.02)	(4.77)	(20.20)
2020	(8.42)	-	(2.59)	(11.01)	(5.03)	(1.78)	(2.11)	(8.92)	(0.41)	(0.32)	(0.23)	(0.96)	(13.86)	(2.10)	(4.93)	(20.89)
2021	(8.68)	-	(2.67)	(11.35)	(5.22)	(1.85)	(2.19)	(9.26)	(0.43)	(0.33)	(0.23)	(0.99)	(14.33)	(2.17)	(5.10)	(21.60)
2022	(8.97)	-	(2.76)	(11.73)	(5.42)	(1.92)	(2.28)	(9.62)	(0.44)	(0.34)	(0.24)	(1.02)	(14.83)	(2.26)	(5.28)	(22.37)
2023	(9.25)	-	(2.85)	(12.09)	(5.63)	(1.99)	(2.37)	(9.98)	(0.45)	(0.35)	(0.25)	(1.05)	(15.33)	(2.34)	(5.46)	(23.13)
2024	(9.55)	-	(2.94)	(12.49)	(5.85)	(2.07)	(2.46)	(10.38)	(0.47)	(0.36)	(0.26)	(1.08)	(15.87)	(2.43)	(5.66)	(23.96)
2025	(9.89)	-	(3.04)	(12.93)	(6.10)	(2.16)	(2.56)	(10.82)	(0.48)	(0.37)	(0.27)	(1.12)	(16.47)	(2.53)	(5.87)	(24.87)
2026	(10.21)	-	(3.14)	(13.35)	(6.34)	(2.24)	(2.66)	(11.24)	(0.50)	(0.38)	(0.27)	(1.16)	(17.05)	(2.63)	(6.08)	(25.76)
2027	(10.55)	-	(3.25)	(13.79)	(6.59)	(2.33)	(2.77)	(11.69)	(0.52)	(0.40)	(0.28)	(1.19)	(17.65)	(2.73)	(6.30)	(26.68)
2028	(10.88)	-	(3.35)	(14.23)	(6.84)	(2.42)	(2.88)	(12.14)	(0.53)	(0.41)	(0.29)	(1.23)	(18.26)	(2.83)	(6.52)	(27.60)
2029	(11.20)	-	(3.45)	(14.65)	(7.09)	(2.51)	(2.98)	(12.58)	(0.55)	(0.42)	(0.30)	(1.26)	(18.83)	(2.93)	(6.73)	(28.49)
2030	(11.56)	-	(3.56)	(15.12)	(7.37)	(2.61)	(3.10)	(13.07)	(0.56)	(0.43)	(0.31)	(1.30)	(19.49)	(3.04)	(6.96)	(29.49)
2031	(11.92)	-	(3.67)	(15.58)	(7.64)	(2.70)	(3.21)	(13.55)	(0.58)	(0.45)	(0.32)	(1.34)	(20.14)	(3.15)	(7.20)	(30.48)
2032	(12.28)	-	(3.78)	(16.06)	(7.92)	(2.80)	(3.33)	(14.06)	(0.60)	(0.46)	(0.33)	(1.38)	(20.80)	(3.26)	(7.44)	(31.50)
2033	$ (0.11)	$ -	$ (0.03)	$ (0.14)	$ (0.07)	$ (0.03)	$ (0.03)	$ (0.13)	$ (0.01)	$ (0.00)	$ (0.00)	$ (0.01)	$ (0.19)	$ (0.03)	$ (0.07)	$ (0.28)
Total	**$ (184.10)**	**$ -**	**$ (56.67)**	**$ (240.76)**	**$ (112.61)**	**$ (39.83)**	**$ (47.33)**	**$ (199.78)**	**$ (9.03)**	**$ (6.93)**	**$ (4.94)**	**$ (20.90)**	**$ (305.74)**	**$ (46.76)**	**$ (108.94)**	**$ (461.44)**
NPV	**$ (98.76)**	**$ -**	**$ (30.40)**	**$ (129.16)**	**$ (59.68)**	**$ (21.11)**	**$ (25.08)**	**$ (105.87)**	**$ (4.85)**	**$ (3.72)**	**$ (2.66)**	**$ (11.23)**	**$ (163.29)**	**$ (24.83)**	**$ (58.14)**	**$ (246.27)**

Economic Impacts of Rates – Other Value Added

The FACW project will lead to considerable rate increases, which in turn, will reduce economic activity and other value-added activity in the state such as proprietor income, rents, and indirect business taxes.

Increases in rates created by the FACW OREC proposal will lead to a $18 million to $45 million per year reduction in other NJ value-added activity or a cumulative reduction of over $350 million (NPV).

Year	Economic Impact (Rates) - Other Value Added															
	Residential Rates				Commercial Rates				Industrial Rates				Total Rate Impact			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
	(million $)															
2013	$ (5.36)	$ -	$ (2.80)	$ (8.16)	$ (5.24)	$ (1.82)	$ (2.18)	$ (9.23)	$ (0.50)	$ (0.36)	$ (0.25)	$ (1.11)	$ (11.09)	$ (2.17)	$ (5.23)	$ (18.49)
2014	(6.94)	-	(3.62)	(10.56)	(6.82)	(2.37)	(2.84)	(12.03)	(0.65)	(0.46)	(0.32)	(1.43)	(14.41)	(2.83)	(6.79)	(24.03)
2015	(7.20)	-	(3.76)	(10.96)	(7.13)	(2.47)	(2.97)	(12.57)	(0.67)	(0.48)	(0.33)	(1.48)	(15.00)	(2.95)	(7.06)	(25.01)
2016	(7.43)	-	(3.88)	(11.31)	(7.40)	(2.57)	(3.08)	(13.05)	(0.69)	(0.49)	(0.34)	(1.53)	(15.52)	(3.06)	(7.30)	(25.89)
2017	(7.65)	-	(4.00)	(11.65)	(7.68)	(2.66)	(3.20)	(13.54)	(0.71)	(0.51)	(0.35)	(1.57)	(16.04)	(3.17)	(7.55)	(26.76)
2018	(7.90)	-	(4.13)	(12.02)	(7.97)	(2.77)	(3.32)	(14.06)	(0.74)	(0.52)	(0.36)	(1.62)	(16.60)	(3.29)	(7.81)	(27.70)
2019	(8.16)	-	(4.27)	(12.43)	(8.30)	(2.88)	(3.45)	(14.63)	(0.76)	(0.54)	(0.37)	(1.67)	(17.22)	(3.42)	(8.09)	(28.74)
2020	(8.42)	-	(4.40)	(12.82)	(8.61)	(2.99)	(3.59)	(15.18)	(0.78)	(0.56)	(0.39)	(1.73)	(17.81)	(3.55)	(8.37)	(29.73)
2021	(8.68)	-	(4.54)	(13.22)	(8.94)	(3.10)	(3.72)	(15.76)	(0.81)	(0.57)	(0.40)	(1.78)	(18.43)	(3.68)	(8.65)	(30.75)
2022	(8.97)	-	(4.68)	(13.65)	(9.29)	(3.22)	(3.87)	(16.38)	(0.83)	(0.59)	(0.41)	(1.83)	(19.09)	(3.82)	(8.96)	(31.87)
2023	(9.25)	-	(4.83)	(14.08)	(9.64)	(3.35)	(4.01)	(17.00)	(0.86)	(0.61)	(0.42)	(1.89)	(19.74)	(3.96)	(9.27)	(32.96)
2024	(9.55)	-	(4.99)	(14.54)	(10.02)	(3.48)	(4.17)	(17.68)	(0.89)	(0.63)	(0.44)	(1.95)	(20.46)	(4.11)	(9.60)	(34.17)
2025	(9.89)	-	(5.17)	(15.05)	(10.45)	(3.62)	(4.35)	(18.42)	(0.92)	(0.65)	(0.45)	(2.02)	(21.25)	(4.28)	(9.97)	(35.49)
2026	(10.21)	-	(5.33)	(15.55)	(10.86)	(3.77)	(4.52)	(19.15)	(0.94)	(0.67)	(0.46)	(2.08)	(22.01)	(4.44)	(10.32)	(36.77)
2027	(10.55)	-	(5.51)	(16.06)	(11.29)	(3.92)	(4.70)	(19.90)	(0.97)	(0.69)	(0.48)	(2.15)	(22.81)	(4.61)	(10.69)	(38.11)
2028	(10.88)	-	(5.69)	(16.57)	(11.72)	(4.07)	(4.88)	(20.67)	(1.00)	(0.71)	(0.49)	(2.21)	(23.61)	(4.78)	(11.06)	(39.45)
2029	(11.20)	-	(5.85)	(17.05)	(12.14)	(4.21)	(5.06)	(21.41)	(1.03)	(0.73)	(0.51)	(2.27)	(24.37)	(4.95)	(11.42)	(40.74)
2030	(11.56)	-	(6.04)	(17.60)	(12.62)	(4.38)	(5.25)	(22.25)	(1.07)	(0.76)	(0.52)	(2.35)	(25.24)	(5.14)	(11.82)	(42.20)
2031	(11.92)	-	(6.23)	(18.14)	(13.09)	(4.54)	(5.45)	(23.08)	(1.10)	(0.78)	(0.54)	(2.42)	(26.10)	(5.32)	(12.21)	(43.63)
2032	(12.28)	-	(6.42)	(18.70)	(13.57)	(4.71)	(5.65)	(23.94)	(1.13)	(0.80)	(0.55)	(2.49)	(26.98)	(5.51)	(12.62)	(45.12)
2033	$ (0.11)	$ -	$ (0.06)	$ (0.17)	$ (0.12)	$ (0.04)	$ (0.05)	$ (0.21)	$ (0.01)	$ (0.01)	$ (0.00)	$ (0.02)	$ (0.24)	$ (0.05)	$ (0.11)	$ (0.40)
Total	**$ (184.10)**	**$ -**	**$ (96.18)**	**$ (280.28)**	**$ (192.88)**	**$ (66.94)**	**$ (80.33)**	**$ (340.14)**	**$ (17.07)**	**$ (12.13)**	**$ (8.39)**	**$ (37.59)**	**$ (394.04)**	**$ (79.07)**	**$ (184.89)**	**$ (658.01)**
NPV	**$ (98.76)**	**$ -**	**$ (51.60)**	**$ (150.36)**	**$ (102.22)**	**$ (35.47)**	**$ (42.57)**	**$ (180.26)**	**$ (9.17)**	**$ (6.52)**	**$ (4.51)**	**$ (20.20)**	**$ (210.15)**	**$ (41.99)**	**$ (98.67)**	**$ (350.82)**

Economic Impacts of Construction and Operation – Output

The FACW project could likely lead to a number of positive economic benefits associated by the construction of the project and its annual operations and maintenance ("O&M") activities. The FACW project is estimated to create between $0.50 million to $13.79 million in new economic activity. Most of the economic activity is associated with the construction in installation of the facility.

Year	Economic Impact (Construction and Operation) - Output								Total	
	Construction				O&M				Construction	Inflation
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	O&M	Adjusted
	(million $)									
2012	$ 7.60	$ 2.74	$ 3.12	$ 13.45	$ -	$ -	$ -	$ -	$ 13.45	$ 13.79
2013	1.90	0.68	0.78	3.36	-	-	-	-	3.36	3.53
2014	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.35
2015	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.36
2016	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.37
2017	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.38
2018	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.39
2019	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.40
2020	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.41
2021	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.42
2022	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.43
2023	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.44
2024	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.45
2025	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.46
2026	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.47
2027	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.48
2028	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.49
2029	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.51
2030	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.52
2031	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.53
2032	-	-	-	-	0.22	0.05	0.05	0.32	0.32	0.54
2033	$ -	$ -	$ -	$ -	$ 0.22	$ 0.05	$ 0.05	$ 0.32	$ 0.32	$ 0.56
Total	**$ 9.50**	**$ 3.42**	**$ 3.90**	**$ 16.82**	**$ 4.37**	**$ 1.07**	**$ 1.05**	**$ 6.49**	**$ 23.31**	**$ 26.25**
NPV	**$ 8.86**	**$ 3.19**	**$ 3.64**	**$ 15.69**	**$ 2.23**	**$ 0.55**	**$ 0.54**	**$ 3.31**	**$ 19.00**	**$ 20.50**

Economic Impacts of Construction and Operation – Jobs

The FACW project could likely lead to a number of employment opportunities for New Jersey workers. Most of these employment opportunities, are concentrated in the first two years of the project during the course of its construction and installation. The first two years of the project are anticipated to create over 96 jobs. Fewer jobs are created in the later years.

Year	Economic Impact (Construction and Operation) - Jobs								
	Construction				O&M				Total Construction O&M
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	
	(number of jobs)								
2012	51.9	18.2	26.1	96.2	-	-	-	-	96.2
2013	10.4	3.6	5.2	19.2	-	-	-	-	19.2
2014	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2015	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2016	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2017	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2018	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2019	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2020	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2021	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2022	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2023	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2024	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2025	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2026	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2027	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2028	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2029	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2030	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2031	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2032	-	-	-	-	0.3	0.3	0.4	1.0	1.0
2033	-	-	-	-	0.3	0.3	0.4	1.0	1.0
Total	**62.3**	**21.8**	**31.3**	**115.4**	**6.0**	**6.0**	**8.0**	**20.0**	**135.4**

Economic Impacts of Construction and Operation – Wages

The new employment opportunities created by the FACW project would lead to increased wage payments. Most of these increased are concentrated in the first two years of the project (construction and installation). The first two years of the project are estimated to create almost $6.3 million in new wages. Annual wages associated with project operational activities are estimated to be much smaller.

Year	Economic Impact (Construction and Operation) - Wages													
	Construction				O&M				Total Construction O&M	Total Inflation Adjusted
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total		
	(million $)									
2012	$ 2.96	$ 1.00	$ 1.07	$ 5.03	$ -	$ -	$ -	$ -	$ 5.03	$ 5.16
2013	0.74	0.25	0.27	1.26	-	-	-	-	1.26	1.32
2014	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.09
2015	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.09
2016	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.10
2017	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.10
2018	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.10
2019	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.10
2020	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.11
2021	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.11
2022	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.11
2023	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.11
2024	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.12
2025	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.12
2026	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.12
2027	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.13
2028	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.13
2029	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.13
2030	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.14
2031	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.14
2032	-	-	-	-	0.05	0.02	0.02	0.08	0.08	0.14
2033	$ -	$ -	$ -	$ -	$ 0.05	$ 0.02	$ 0.02	$ 0.08	$ 0.08	$ 0.15
Total	**$ 3.71**	**$ 1.24**	**$ 1.34**	**$ 6.29**	**$ 0.97**	**$ 0.37**	**$ 0.36**	**$ 1.70**	**$ 7.98**	**$ 8.81**
NPV	**$ 3.46**	**$ 1.16**	**$ 1.25**	**$ 5.86**	**$ 0.49**	**$ 0.19**	**$ 0.18**	**$ 0.87**	**$ 6.73**	**$ 7.18**

Economic Impacts of Construction and Operation – Other Value Added

The construction and operation of the FACW would also lead to positive value added impacts, most of which occur during the construction phase of the project. Cumulative value added benefits are estimated to be as large as $12.2 million (NPV).

Year	Economic Impact (Construction and Operation) - Other Value Added													
	Construction				O&M				Total Construction O&M	Total Inflation Adjusted
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total		
	(million $)									
2012	$ 4.29	$ 1.51	$ 1.94	$ 7.74	$ -	$ -	$ -	$ -	$ 7.74	$ 7.94
2013	1.94	0.38	0.48	1.94	-	-	-	-	1.94	2.03
2014	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.23
2015	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.24
2016	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.25
2017	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.25
2018	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.26
2019	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.27
2020	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.27
2021	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.28
2022	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.29
2023	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.29
2024	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.30
2025	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.31
2026	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.32
2027	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.32
2028	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.33
2029	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.34
2030	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.35
2031	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.36
2032	-	-	-	-	0.16	0.03	0.03	0.22	0.22	0.37
2033	$ -	$ -	$ -	$ -	$ 0.16	$ 0.03	$ 0.03	$ 0.22	$ 0.22	$ 0.37
Total	**$ 6.23**	**$ 1.89**	**$ 2.42**	**$ 9.68**	**$ 3.12**	**$ 0.58**	**$ 0.65**	**$ 4.36**	**$ 14.04**	**$ 15.96**
NPV	**$ 5.77**	**$ 1.76**	**$ 2.26**	**$ 9.03**	**$ 1.59**	**$ 0.30**	**$ 0.33**	**$ 2.22**	**$ 11.25**	**$ 12.21**

Economic Impacts of Tourism – Output and Jobs

Revised tourism impacts are estimated to lead to as much as $5.9 million in new economic activity (NPV terms) and lead to a cumulative total of as many as 105 new employment opportunities.

Year	Tourism Impact							
	Output				Jobs			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
	(million $)				(jobs)			
2012	$ 0.07	$ 0.01	$ 0.02	$ 0.10	1	0	0	1
2013	0.48	0.10	0.11	0.70	5	1	1	6
2014	0.35	0.07	0.08	0.51	3	1	1	5
2015	0.29	0.06	0.07	0.42	3	1	1	4
2016	0.30	0.06	0.07	0.43	3	1	1	4
2017	0.30	0.06	0.07	0.44	3	1	1	4
2018	0.31	0.06	0.07	0.45	3	1	1	4
2019	0.32	0.06	0.08	0.46	3	1	1	4
2020	0.33	0.07	0.08	0.47	3	1	1	4
2021	0.34	0.07	0.08	0.48	3	1	1	5
2022	0.34	0.07	0.08	0.50	3	1	1	5
2023	0.35	0.07	0.08	0.51	3	1	1	5
2024	0.36	0.07	0.09	0.52	3	1	1	5
2025	0.37	0.08	0.09	0.53	4	1	1	5
2026	0.38	0.08	0.09	0.55	4	1	1	5
2027	0.39	0.08	0.09	0.56	4	1	1	5
2028	0.40	0.08	0.10	0.58	4	1	1	5
2029	0.41	0.08	0.10	0.59	4	1	1	5
2030	0.42	0.08	0.10	0.60	4	1	1	6
2031	0.43	0.09	0.10	0.62	4	1	1	6
2032	0.44	0.09	0.11	0.64	4	1	1	6
2033	$ 0.45	$ 0.09	$ 0.11	$ 0.65	4	1	1	6
Total	**$ 7.84**	**$ 1.59**	**$ 1.87**	**$ 11.30**	**75**	**14**	**16**	**105**
NPV	**$ 4.07**	**$ 0.82**	**$ 0.97**	**$ 5.86**				

Economic Impacts of Tourism – Wages, Other Value Added and Total Impact

Year	Tourism Impact											
	Wages				Other Value Added				Total $ Impact			
	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total	Direct	Indirect	Induced	Total
	(million $)				(million $)				(million $)			
2012	$ 0.02	$ 0.00	$ 0.01	$ 0.04	$ 0.04	$ 0.01	$ 0.01	$ 0.06	$ 0.13	$ 0.03	$ 0.03	$ 0.19
2013	0.18	0.03	0.04	0.25	0.28	0.06	0.07	0.42	0.94	0.19	0.23	1.36
2014	0.13	0.02	0.03	0.19	0.21	0.04	0.05	0.31	0.69	0.14	0.17	1.00
2015	0.11	0.02	0.02	0.15	0.17	0.04	0.04	0.25	0.57	0.11	0.14	0.82
2016	0.11	0.02	0.03	0.16	0.17	0.04	0.05	0.26	0.58	0.12	0.14	0.84
2017	0.11	0.02	0.03	0.16	0.18	0.04	0.05	0.26	0.60	0.12	0.15	0.86
2018	0.12	0.02	0.03	0.16	0.18	0.04	0.05	0.27	0.61	0.12	0.15	0.88
2019	0.12	0.02	0.03	0.17	0.19	0.04	0.05	0.28	0.63	0.13	0.15	0.90
2020	0.12	0.02	0.03	0.17	0.19	0.04	0.05	0.28	0.64	0.13	0.16	0.93
2021	0.12	0.02	0.03	0.18	0.20	0.04	0.05	0.29	0.66	0.13	0.16	0.95
2022	0.13	0.02	0.03	0.18	0.20	0.04	0.05	0.30	0.67	0.14	0.16	0.97
2023	0.13	0.02	0.03	0.19	0.21	0.04	0.05	0.30	0.69	0.14	0.17	1.00
2024	0.13	0.03	0.03	0.19	0.21	0.04	0.06	0.31	0.71	0.14	0.17	1.02
2025	0.14	0.03	0.03	0.19	0.22	0.05	0.06	0.32	0.73	0.15	0.18	1.05
2026	0.14	0.03	0.03	0.20	0.22	0.05	0.06	0.33	0.74	0.15	0.18	1.08
2027	0.14	0.03	0.03	0.20	0.23	0.05	0.06	0.34	0.76	0.15	0.19	1.10
2028	0.15	0.03	0.03	0.21	0.23	0.05	0.06	0.34	0.78	0.16	0.19	1.13
2029	0.15	0.03	0.04	0.21	0.24	0.05	0.06	0.35	0.80	0.16	0.20	1.16
2030	0.15	0.03	0.04	0.22	0.25	0.05	0.06	0.36	0.82	0.17	0.20	1.19
2031	0.16	0.03	0.04	0.23	0.25	0.05	0.07	0.37	0.84	0.17	0.21	1.22
2032	0.16	0.03	0.04	0.23	0.26	0.05	0.07	0.38	0.86	0.17	0.21	1.25
2033	$ 0.17	$ 0.03	$ 0.04	$ 0.24	$ 0.27	$ 0.06	$ 0.07	$ 0.39	$ 0.88	$ 0.18	$ 0.22	$ 1.28
Total	**$ 2.89**	**$ 0.54**	**$ 0.68**	**$ 4.11**	**$ 4.60**	**$ 0.97**	**$ 1.20**	**$ 6.77**	**$ 15.33**	**$ 3.10**	**$ 3.74**	**$ 22.17**
NPV	**$ 1.50**	**$ 0.28**	**$ 0.35**	**$ 2.13**	**$ 2.39**	**$ 0.50**	**$ 0.62**	**$ 3.51**	**$ 7.95**	**$ 1.61**	**$ 1.94**	**$ 11.50**

Economic Impacts of Tourism – Wages, Other Value Added and Total Impact

The FACW project is estimated to have a negative net economic impact on New Jersey. Overall, the FACW project, if approved, will likely result in a net reduction in New Jersey economic output and value added of some $1.0 billion (NPV, with tourism) and the cumulative reduction of close to 30,000 employment years.

	Economic Impacts								Total Economic Impact		Tourism		Net Benefits with Tourism	
	Rates				Construction and Operation									
Year	Output (million $)	Jobs	Wages (million $)	Other Value Added (million $)	Output (million $)	Jobs	Wages (million $)	Other Value Added (million $)	Output, Wages and Value Added (million $)	Jobs	Tourism Impact (million $)	Tourism Impact (jobs)	Total Impact (million $)	Total Impact (jobs)
2012	$ -	-	$ -	$ -	$ 13.45	96.2	$ 5.03	$ 7.74	$ 26.23	96	$ 0.19	1	$ 26.42	97
2013	(27.03)	(864)	(13.04)	(18.49)	3.36	19.2	1.26	1.94	(52.01)	(844)	1.36	6	(50.65)	(838)
2014	(35.06)	(1,119)	(16.94)	(24.03)	0.32	1.0	0.08	0.22	(75.39)	(1,118)	1.00	5	(74.39)	(1,113)
2015	(36.44)	(1,162)	(17.62)	(25.01)	0.32	1.0	0.08	0.22	(78.45)	(1,161)	0.82	4	(77.63)	(1,157)
2016	(37.66)	(1,200)	(18.23)	(25.89)	0.32	1.0	0.08	0.22	(81.14)	(1,199)	0.84	4	(80.30)	(1,195)
2017	(38.87)	(1,237)	(18.83)	(26.76)	0.32	1.0	0.08	0.22	(83.83)	(1,236)	0.86	4	(82.97)	(1,232)
2018	(40.18)	(1,277)	(19.48)	(27.70)	0.32	1.0	0.08	0.22	(86.73)	(1,276)	0.88	4	(85.85)	(1,272)
2019	(41.62)	(1,322)	(20.20)	(28.74)	0.32	1.0	0.08	0.22	(89.93)	(1,321)	0.90	4	(89.02)	(1,316)
2020	(42.99)	(1,364)	(20.89)	(29.73)	0.32	1.0	0.08	0.22	(92.98)	(1,363)	0.93	4	(92.05)	(1,358)
2021	(44.40)	(1,407)	(21.60)	(30.75)	0.32	1.0	0.08	0.22	(96.13)	(1,406)	0.95	5	(95.18)	(1,402)
2022	(45.94)	(1,455)	(22.37)	(31.87)	0.32	1.0	0.08	0.22	(99.55)	(1,454)	0.97	5	(98.58)	(1,449)
2023	(47.45)	(1,501)	(23.13)	(32.96)	0.32	1.0	0.08	0.22	(102.91)	(1,500)	1.00	5	(101.92)	(1,495)
2024	(49.11)	(1,552)	(23.96)	(34.17)	0.32	1.0	0.08	0.22	(106.61)	(1,551)	1.02	5	(105.58)	(1,546)
2025	(50.93)	(1,608)	(24.87)	(35.49)	0.32	1.0	0.08	0.22	(110.67)	(1,607)	1.05	5	(109.62)	(1,602)
2026	(52.69)	(1,661)	(25.76)	(36.77)	0.32	1.0	0.08	0.22	(114.59)	(1,660)	1.08	5	(113.52)	(1,655)
2027	(54.52)	(1,717)	(26.68)	(38.11)	0.32	1.0	0.08	0.22	(118.67)	(1,716)	1.10	5	(117.57)	(1,711)
2028	(56.36)	(1,773)	(27.60)	(39.45)	0.32	1.0	0.08	0.22	(122.78)	(1,772)	1.13	5	(121.66)	(1,767)
2029	(58.10)	(1,826)	(28.49)	(40.74)	0.32	1.0	0.08	0.22	(126.70)	(1,825)	1.16	5	(125.54)	(1,820)
2030	(60.09)	(1,887)	(29.49)	(42.20)	0.32	1.0	0.08	0.22	(131.16)	(1,886)	1.19	6	(129.97)	(1,880)
2031	(62.04)	(1,946)	(30.48)	(43.63)	0.32	1.0	0.08	0.22	(135.53)	(1,945)	1.22	6	(134.32)	(1,939)
2032	(64.06)	(2,007)	(31.50)	(45.12)	0.32	1.0	0.08	0.22	(140.05)	(2,006)	1.25	6	(138.80)	(2,000)
2033	$ (0.57)	(18)	$ (0.28)	$ (0.40)	$ 0.32	1.0	$ 0.08	$ 0.22	$ (0.63)	(17)	$ 1.28	6	$ 0.65	(11)
Sum	**$ (946.10)**	**(29,902)**	**$ (461.44)**	**$ (658.01)**	**$ 23.31**	**135.4**	**$ 7.98**	**$ 14.04**	**$ (2,020.23)**	**(29,766)**	**$ 22.17**	**$ 105.07**	**$ (1,998.05)**	**(29,661)**
NPV	**$ (477.24)**		**$ (232.33)**	**$ (330.96)**	**$ 19.00**		**$ 6.73**	**$ 11.25**	**$ (1,003.55)**	**(14,995)**	**$ 11.50**	**$ 54.50**	**$ (992.05)**	**(14,940)**

Appendix 7: Sources Consulted

Appendix 7. Sources Consulted

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