

The Law Offices of  
**Ernest L. Edwards, Jr., APLC**

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300 Lake Marina Avenue, Unit 5BE  
New Orleans, LA 70124

**Via: Federal Express**

January 19, 2018

Ms. Lora W. Johnson  
Clerk of Council  
City Hall - Room 1E09  
1300 Perdido Street  
New Orleans, LA 70112

**Re: Application of Entergy New Orleans, Inc.  
for Approval to Construct New Orleans Power Station  
and Request for Cost Recovery and Timely Relief  
CNO Docket No. UD-16-02**

Dear Ms. Johnson:

Please find enclosed the original and three copies of the Brief of Air Products and Chemicals, Inc. in the docket noted above. Please file the attached brief and this letter in the record of the proceeding and return one time-stamped copy to the above address, in accordance with normal procedures. I hereby certify that on this date I have served by email to all parties on the attached service list the same.

I also certify that on this date I have served by means of overnight Federal Express a copy of the HSPM version of the Brief of Air Products and Chemicals, Inc. in the docket noted above, to those parties on the attached service list who are entitled to receive an HSPM version (noted by an '\*').

Should you have any questions regarding the above matter, please do not hesitate to contact me. Thank you for your assistance with this matter.

Respectfully submitted,



Ernest L. Edwards, Jr., Esq.  
Counsel for Air Products and Chemicals, Inc.

Enclosure

cc: Official Service List UD-16-02 (via e-mail)

September 29, 2017

**Application of Entergy New Orleans, Inc. for Approval to Construct New Orleans Power  
Station and Request for Cost Recovery and Timely Relief  
CNO Docket NO: UD-16-02**

**Lora W. Johnson**, [lwjohnson@nola.gov](mailto:lwjohnson@nola.gov)

Clerk of Council  
City Hall - Room 1E09  
1300 Perdido Street  
New Orleans, LA 70112  
(504) 658-1085 - office  
(504) 658-1140 – fax

**Pearlina Thomas**, [pthomas@nola.gov](mailto:pthomas@nola.gov)

Chief of Staff, Council Utilities Regulatory Office

**W. Thomas Stratton, Jr.**, [wstrattonjr@nola.gov](mailto:wstrattonjr@nola.gov)

Director, Council Utilities Regulatory Office

City Hall - Room 6E07  
1300 Perdido Street  
New Orleans, LA 70112  
(504) 658-1110 - office  
(504) 658-1117 – fax

**David Gavlinski**, 504-658-1101, [dsgavlinski@nola.gov](mailto:dsgavlinski@nola.gov)

Interim Council Chief of Staff

City Hall - Room 1E06  
1300 Perdido Street  
New Orleans, LA 70112

**Rebecca Dietz**, [rhdietz@nola.gov](mailto:rhdietz@nola.gov)

**Bobbie Mason**, [bfmason1@nola.gov](mailto:bfmason1@nola.gov)

Law Department  
City Hall- 5<sup>th</sup> Floor  
New Orleans, LA 70112  
(504) 658-9800 – office  
(504) 658-9869 – fax

**Beverly Gariepy**, [bbgariepy@nola.gov](mailto:bbgariepy@nola.gov)

Department of Finance  
City Hall - Room 3E06  
1300 Perdido Street  
New Orleans, LA 70112  
(504) 658-1502- office  
(504) 658-1705 – fax

## ADMINISTRATIVE HEARING OFFICER

**Hon. Jeffrey S. Gulin**, [jgulin@verizon.net](mailto:jgulin@verizon.net)  
3203 Bridle Ridge Lane  
Lutherville, MD 21093  
(410) 627-5357

## NEW ORLEANS CITY COUNCIL CONSULTANTS

\***Clinton A. Vince**, [clinton.vince@dentons.com](mailto:clinton.vince@dentons.com)  
**Presley Reed**, [presley.reedjr@dentons.com](mailto:presley.reedjr@dentons.com)  
**Emma F. Hand**, [emma.hand@dentons.com](mailto:emma.hand@dentons.com)  
DENTONS US LLP  
1900 K Street NW  
Washington, DC 20006  
(202) 408-6400 - office  
(202) 408-6399 - fax

**Basile J. Uddo** (504) 583-8604 cell, [buddo@earthlink.net](mailto:buddo@earthlink.net)  
**\*J. A. "Jay" Beatmann, Jr.** (504) 256-6142 cell, (504) 524-5446 office direct,  
[jay.beatmann@dentons.com](mailto:jay.beatmann@dentons.com)  
c/o DENTONS US LLP  
650 Poydras Street  
Suite 2850  
New Orleans, LA 70130

\***Walter J. Wilkerson**, [wwilkerson@wilkersonplc.com](mailto:wwilkerson@wilkersonplc.com)  
**Kelley Bazile**, [kbazile@wilkersonplc.com](mailto:kbazile@wilkersonplc.com)  
Wilkerson and Associates, PLC  
650 Poydras Street - Suite 1913  
New Orleans, LA 70130  
(504) 522-4572 - office  
(504) 522-0728 - fax

\***Joseph Vumbaco**, [jvumbaco@ergconsulting.com](mailto:jvumbaco@ergconsulting.com)  
**Joseph W. Rogers**, [jrogers@ergconsulting.com](mailto:jrogers@ergconsulting.com)  
**Victor M. Prep**, [vprep@ergconsulting.com](mailto:vprep@ergconsulting.com)  
**Byron S. Watson**, [bwatson@ergconsulting.com](mailto:bwatson@ergconsulting.com)  
Legend Consulting Group  
8055 East Tufts Ave., Suite 1250  
Denver, CO 80237-2835  
(303) 843-0351 - office  
(303) 843-0529 - fax

**\*Errol Smith**, [ersmith@btcpas.com](mailto:ersmith@btcpas.com)

Bruno and Tervalon  
4298 Elysian Fields Avenue  
New Orleans, LA 70122  
(504) 284-8733 - office  
(504) 284-8296 – fax

**ENTERGY NEW ORLEANS, INC.**

**Gary E. Huntley**, [ghuntley@entergy.com](mailto:ghuntley@entergy.com)

Entergy New Orleans, Inc.  
Vice-President, Regulatory Affairs  
1600 Perdido Street, L-MAG 505B  
New Orleans, LA 70112  
(504) 670-3680 - office  
(504) 670-3615 - fax

**Seth Cureington**, [scurein@entergy.com](mailto:scurein@entergy.com)

Entergy New Orleans, Inc.  
Manager, Resource Planning  
1600 Perdido Street, L-MAG 505B  
New Orleans, LA 70112  
504-670-3602 office  
504-670-3615 fax

**\*Tim Cragin** (504) 576-6523 office, [tcragin@entergy.com](mailto:tcragin@entergy.com)

**Brian L. Guillot** (504) 576-2603 office, [bguill1@entergy.com](mailto:bguill1@entergy.com)

**Alyssa Maurice-Anderson** (504) 576-6523 office, [amauric@entergy.com](mailto:amauric@entergy.com)

**Harry Barton**, [hbarton@entergy.com](mailto:hbarton@entergy.com)

**Karen Freese** (504) 576-4170 office, [kfreese@entergy.com](mailto:kfreese@entergy.com)

Entergy Services, Inc.  
Mail Unit L-ENT-26E  
639 Loyola Avenue  
New Orleans, LA 70113  
(504) 576-5579 – fax

**Joe Romano, III** (504) 576-4764, [jroman1@entergy.com](mailto:jroman1@entergy.com)

**Suzanne Fontan** (504) 576-7497, [sfontan@entergy.com](mailto:sfontan@entergy.com)

**Danielle Burleigh** (504) 576-6185, [dburlei@entergy.com](mailto:dburlei@entergy.com)

**Therese Perrault** (504-576-6950), [tperrau@entergy.com](mailto:tperrau@entergy.com)

Entergy Services, Inc.  
Mail Unit L-ENT-4C  
639 Loyola Avenue  
New Orleans, LA 70113  
(504)576-6029 – fax

## ALLIANCE FOR AFFORDABLE ENERGY

\***Logan Atkinson Burke**, (646) 942-7149, [logan@all4energy.org](mailto:logan@all4energy.org)

\***Forest Wright**, [forest@all4energy.org](mailto:forest@all4energy.org)

**Sophie Zaken**, [regulatory@all4energy.org](mailto:regulatory@all4energy.org)

4505 S. Claiborne Ave.

New Orleans, LA 70125

\***Susan Stevens Miller**, (202) 667-4500, [smiller@earthjustice.org](mailto:smiller@earthjustice.org)

\***Chinyere Osuala**, (202) 667-4500, [cosuala@earthjustice.org](mailto:cosuala@earthjustice.org)

\***Al Luna**, (202) 667-4500, [aluna@earthjustice.org](mailto:aluna@earthjustice.org)

1625 Massachusetts Ave., NW Ste 702

Washington D.C. 20036

## POSIGEN

**Benjamin Norwood**, [bnorwood@posigen.com](mailto:bnorwood@posigen.com)

**Beth Galante**, [bgalante@posigen.com](mailto:bgalante@posigen.com)

819 Central Ave. Suite 210

Jefferson, LA. 70121

(504)293-5665

## AIR PRODUCTS AND CHEMICALS, INC.

\***Ernest L. Edwards Jr**, [ledwards0526@gmail.com](mailto:ledwards0526@gmail.com)

The Law Offices of Ernest L. Edwards Jr, APLC

300 Lake Marina Avenue unit 5BE

New Orleans, LA 70124

Phone: 504 450-4226

\***Mark Zimmerman**, [zimmermr@airproducts.com](mailto:zimmermr@airproducts.com)

Air Products and Chemicals, Inc.

7201 Hamilton Boulevard

Allentown, PA 18195-1501

610-481-1288 - office

610-481-2182 – fax

\***Maurice Brubaker**, (636) 898-6725, [mbrubaker@consultbai.com](mailto:mbrubaker@consultbai.com)

Brubaker & Associates, Inc.

16690 Swingley Ridge Road, Suite 140

Chesterfield, MO 63017

\***James R. Dauphinais**, (636) 898-6725, [jdauphinais@consultbai.com](mailto:jdauphinais@consultbai.com)

Brubaker & Associates, Inc.

16690 Swingley Ridge Road, Suite 140

Chesterfield, MO 63017

**DEEP SOUTH CENTER FOR  
ENVIRONMENTAL JUSTICE, INC.**

**\*Monique Harden**, (504) 517-2534, [MoniqueCovHarden@gmail.com](mailto:MoniqueCovHarden@gmail.com)  
3157 Gentilly Blvd., #145  
New Orleans, LA 70122

**NEW ORLEANS COLD STORAGE & WAREHOUSE CO., LTD.**

**Luke Piontek**, [LPiontek@roedelparsons.com](mailto:LPiontek@roedelparsons.com)  
**Judith Sulzer**, [Jsulzer@roedelparsons.com](mailto:Jsulzer@roedelparsons.com)  
**Gayle T. Kellner**  
**Christian J. Rhodes**  
**Shelley Ann McGlathery**  
Roedel, Parsons, Koch, Blache,  
Balhoff & McCollister  
8440 Jefferson Highway, Suite 301  
Baton Rouge, LA 70809  
Telephone: (225) 929-7033  
Facsimile: (225) 928-4925

**GULF STATES RENEWABLE ENERGY INDUSTRIES ASSOCIATION**

**Jeff Cantin, President**, (504) 383-8936, [jcantin@gsreia.org](mailto:jcantin@gsreia.org)  
**Will Feldman**, (818) 631-9884, [wfeldman@gsreia.org](mailto:wfeldman@gsreia.org)  
400 Poydras St., Suite 900  
New Orleans, LA 70130

**SIERRA CLUB**

**\*Joshua Smith**, [joshua.smith@sierraclub.org](mailto:joshua.smith@sierraclub.org)  
Sierra Club Environmental Law Program  
2101 Webster St., Suite 1300  
Oakland, CA. 94612  
(412) 977-5560

**\*Robert B. Wiygul**, [robert@wwglaw.com](mailto:robert@wwglaw.com)  
Waltzer, Wiygul, & Garside, LLC  
1011 Iberville Dr.  
Ocean Springs, MS 39564  
(228)872-1125

**Michael Brown**, [michael@wwglaw.com](mailto:michael@wwglaw.com)  
Waltzer, Wiygul, & Garside, LLC  
1000 Behrman Hwy  
Gretna, LA 70056  
(504)340-6330

**BEFORE THE  
COUNCIL OF THE CITY OF NEW ORLEANS**

***IN RE:* APPLICATION OF ENTERGY )  
NEW ORLEANS, INC. FOR APPROVAL )  
TO CONSTRUCT NEW ORLEANS POWER ) DOCKET NO. UD-16-02  
STATION AND REQUEST FOR COST )  
RECOVERY AND TIMELY RELIEF )**

**BRIEF OF  
AIR PRODUCTS AND CHEMICALS, INC.**

**PUBLIC VERSION**  
(\*\*\*indicates HSPM removed)

Dated: January 19, 2018

Ernest L. Edwards, Jr., Esq.  
300 Lake Marina Avenue, Unit 5BE  
New Orleans, LA 70124  
Phone: (504) 450-4226  
Email: [ledwards0526@gmail.com](mailto:ledwards0526@gmail.com)

**BEFORE THE  
COUNCIL OF THE CITY OF NEW ORLEANS**

***IN RE: APPLICATION OF ENTERGY )  
NEW ORLEANS, INC. FOR APPROVAL )  
TO CONSTRUCT NEW ORLEANS POWER ) DOCKET NO. UD-16-02  
STATION AND REQUEST FOR COST )  
RECOVERY AND TIMELY RELIEF )***

**BRIEF IN SUPPORT OF  
CONCLUSIONS AND RECOMMENDATIONS  
ON BEHALF OF  
AIR PRODUCTS AND CHEMICALS, INC.**

**INTRODUCTION AND SUMMARY**

MAY IT PLEASE THE CITY COUNCIL OF THE CITY OF NEW ORLEANS

Air Products and Chemicals, Inc. (“Air Products”) is the largest industrial customer of Entergy New Orleans, Inc. (“ENO”) and a major contributor to the economy of the City of New Orleans, Louisiana. Following the devastation from Hurricane Katrina, Air Products invested in excess of \$80 million to rebuild its facility and maintain its presence in New Orleans. Air Products’ continued operation (at the current level of production, higher or lower) is dependent in large measure upon reliable sources of electric power at reasonable cost. Air Products operates other plants in Louisiana and Texas, which effectively compete against each other. Electricity costs in New Orleans are higher than all of those other facilities.

Since reliable electric supply is crucial to all customers, the decommissioning of the two ENO power plants at Michoud (near the Air Products facility) exposed all customers to potential cascading losses of supply. Absent construction of the proposed New Orleans Power Station (“NOPS”), or a significant and also costly transmission build out, New Orleans is exposed as an isolated island without a supply of electricity. Air Products has a significant interest in the



outcome of ENO Docket No. 16-02. Accordingly Air Products intervened therein and has been an active participant in the proceedings.

During the discovery period, Air Products became even more concerned about the outcome of the application of ENO for permission to construct NOPS, which action is in keeping with this City Council's 2015 Resolution R-15-524, that "directed" ENO to "use reasonable diligent efforts to pursue development of at least 120 MW of new build peaking generation capacity within the City of New Orleans and to use diligent efforts to have at least one future generation facility located in the City of New Orleans." R-15-524 also directed ENO to "fully evaluate Michoud or Paterson as potential sites..." The NOPS project, if approved, would comply with each of these directives.

Air Products is of the opinion that it is in the best interest of the residents and businesses of New Orleans that ENO construct a new electric power generation plant at Michoud, and that the most prudent choice therefore is the seven Reciprocating Internal Combustion Engines ("RICE") Alternative. Initially, Air Products recommends that ENO install only four or five of the seven Wartsila 15V5056 RICE units, but include the infrastructure for all seven, in case future load growth justifies the additional units.

Air Products submitted testimony of James Dauphinais and Maurice Brubaker. Mr. Dauphinais filed Direct Testimony in which he was critical of ENO's transmission analysis. After a review of ENO's Supplemental and Amending Testimony, Mr. Dauphinais concluded that ENO's updated transmission analysis was reasonable; and accordingly, Mr. Dauphinais did not file any Additional Direct Testimony questioning ENO's transmission analysis. Mr. Brubaker testified about the need for added capacity, the type and amount of capacity that should be installed and cost recovery for any NOPS unit that may be approved by the Council, as

well as a revised cost recovery methodology associated with Ninemile Unit 6 and Union Power Station.

Using the framework of the Joint Statement of Issues, a summary of our findings, conclusions, and recommendations is as follows, to wit:

**I. Whether ENO’s Analysis of Need is Sufficient to Justify an Investment**

Air Products finds that ENO has demonstrated a need for capacity, both from the perspective of achieving a reasonable reserve margin above its expected peak load, and also from a locational reliability perspective.

**II. Whether Either of ENO’s Choices of Technologies is in the Public Interest**

Air Products has concluded that the Combustion Turbine (“CT”) Alternative is too large and too inflexible to meet the needs of ENO’s customers. Air Products is of the view that ENO’s RICE Alternative is in the public interest; but that not all seven of the Wartsila units should be constructed at this time.

**III. Whether ENO’s Selection of the Michoud Site is Reasonable**

Air Products is not aware that there is any viable site for construction of NOPS other than the Michoud site, and supports construction of the RICE facility at that location.

**IV. Whether ENO’s Proposed Costs, Cost Recovery Mechanism and Monitoring Plan are Just and Reasonable and Should be Approved by the Council**

As a means of cost recovery for the non-fuel revenue requirement associated with the NOPS facility, Air Products supports a two-step rate increase that would be developed in conjunction with the 2018 Combined rate case filing. The first step would exclude the revenue requirement associated with NOPS; while the second step would recognize a higher level of rates

that would become effective following the commercial operation of the NOPS unit. This suggestion was presented by the Advisors and has generally been accepted by ENO.

Nonetheless, ENO prefers a rider, a modified version of the Purchased Power and Capacity Acquisition Cost Recovery Rider (“PPCACR Rider”), that would adjust rates for the NOPS revenue requirement when it goes into service. This is not the preferred approach for Air Products or the Advisors, but if this alternative is permitted, then the specific mechanism for apportioning these costs to customer classes must be decided in the Combined rate case. Air Products supports the recommendation of the Advisors that if this is the route taken, the allocation to customer classes be as an equal percentage of base rate revenues. This is the only logical approach in the absence of a cost of service based allocation.

The existing PPCACR Rider (that recovers the costs of Ninemile Unit 6 and Union Power Station) allocates the non-fuel revenue requirements on a customer class kilowatt hour basis. This is not cost-based and therefore is invalid under standard regulatory principles, and moreover is costing Air Products millions of dollars in excess charges (over \$3 million of excess charges through September 2017), above what should have been charged had the rate case procedure called for been followed. The over-charge continues at the rate of approximately \$1.5 million per year. The Advisors agree that Air Products is being overcharged. Air Products submits that it would be unreasonable to wait for an additional 18 to 24 months for the Combined rate case to fix this problem. Rather, at the conclusion of this proceeding, and within 60 days of the Council’s resolution, the PPCACR recoveries should be realigned across customer classes as an equal percent of base rate revenues. If that is not possible outside of a rate case, then in the 2018 combined rate case Air Products should be compensated for the overcharges.

Air Products supports the position of the Advisors on the monitoring plan.

## **EVIDENCE ON CONTESTED ISSUES**

In this section of its brief, Air Products sets forth the key evidence in support of the positions which it has taken in this docket.

### **I. Whether ENO's Analysis of Need is Sufficient to Justify an Investment for Capacity and/or Reliability**

After reviewing the evidence, especially the Supplemental and Amending Direct Testimony of ENO witness Cureington filed in July of 2017, Air Products concluded that there is a capacity deficit on the ENO system, and a need to install additional capacity. The specific details supporting this conclusion are set forth on Exhibit SEC-11, which is attached to Mr. Cureington's testimony. Although the specific numbers have been declared Highly Sensitive Protected Materials ("HSPM"), it is clear from a review of this load and capacity statement that unless additional capacity is added to the ENO system, ENO will have a large and persistent deficit and would not be able to meet its customers' needs.

As Mr. Brubaker noted at page 5 of his Additional Direct Testimony, ENO's updated studies indicate a long-term capacity need of approximately 99 MW by 2026, and up to 248 MW by 2036 (Brubaker Additional Direct Testimony, page 3, lines 13-15). Mr. Brubaker also noted that the 2036 data is a forecast almost 20 years into the future, and it is very possible that the load will not grow as much as projected; that anticipated retirements of power plants in Amite South will be delayed, or that both will occur, resulting in less need for capacity than asserted by ENO (Brubaker Additional Direct Testimony, page 6, lines 2-6).

While Air Products supports adding some capacity, it does not believe that the evidence would justify adding the 226 MW CT unit because there is not a near-term need for this amount of capacity. The portion of Mr. Cureington's Exhibit SEC-11 that displays the results of adding

the CT was marked as Exhibit AP No. 2, and is appended hereto as Attachment A to this brief. The bottom line on this schedule shows the result of adding the CT. It is obvious that adding the 226 MW CT would create significant excess capacity for a prolonged period of time, and that it is not a suitable addition as reserve margins would increase above the 12% target, to more than \*\*\*\*\*. Because of the large amount of excess capacity it would create, the CT may not be considered used and useful by the City Council.

As Mr. Brubaker noted:

**“Q IN YOUR OPINION, DOES THIS FORECAST JUSTIFY ADDING 226 MW OF CAPACITY (THE PROPOSED NOPS CT) AT THIS TIME?”**

A No. There is not an immediate need for that amount of capacity. The near-term need as forecasted by ENO is less than 100 MW. In light of the long time before an indicated capacity need would approach 226 MW, a smaller amount of capacity added now will cover needs in the near future, provide time to evaluate how loads actually materialize, and allow stakeholders to monitor the need for and timing of unit retirements. The smaller revenue requirement associated with a smaller capacity addition also will reduce risk and create less of an impact on customers.” (Brubaker Additional Direct Testimony, page 6, lines 10-18.)

That portion of Mr. Cureington’s Exhibit SEC-11 that deals with the RICE facilities was marked as Exhibit AP No. 3, and is appended hereto as Attachment B. The last line on this chart again shows the result of adding the NOPS capacity, in this case the 128 MW RICE facility. It yields excess capacity as well, but not near to the same extent as would be true if the CT were added.

Air Products witness Brubaker concluded (page 8 of his Additional Direct Testimony, lines 6-13) that the RICE Alternative resource is a more appropriate fit for the needs of ENO’s customers at this point in time.

Advisors' witness Rogers came to the same conclusion, stating as follows at page 3, lines 10-15 of his Direct Testimony:

“Among the two NOPS configurations, I recommend that the Council strongly consider favoring the 128 MW project, consisting of seven Reciprocating Internal Combustion Engine (“RICE”) generator sets, due to its better fit with ENO’s load and capability needs especially when considering the Council’s 2% DSM Goal, superior heat rate, operational flexibility, and black start capability in the event that New Orleans becomes disconnected from the regional transmission grid.”

In addition to being more suitable from a size of capacity standpoint, the RICE resource possesses a number of beneficial characteristics as compared to the CT. Air Products witness Brubaker noted some of these at pages 8-9 of his Additional Direct Testimony. He also summarized them during cross-examination by counsel for ENO (December 20, 2017 Transcript, page 176, line 15 through page 179, line 7). The nine key benefits of the RICE facility, as compared to the CT, are as follows:

1. The RICE units produce a kWh of energy with fewer BTUs (less energy) than is the case for the CT.
2. The RICE units are less costly to start, because the fuel consumption per start is generally lower than for the CT.
3. The RICE resource is more flexible than the CT because the RICE units have a shorter minimum run time, so they can be operated for a shorter period of time each day than the CT, which means there could be economies by not having to operate the units when the load does not require them to be operated.
4. Because there are multiple RICE units, all of the capacity does not need to be committed whenever there is some capacity need. This modular feature of the RICE resource means the amount of capacity committed and operated can be matched more closely to actual system needs. For example, only a few units can be run if that is all that is needed.
5. This modular feature also contributes to the reliability provided by the units. If the CT has a forced outage, all of its capacity will be generally unavailable; whereas given that there are multiple RICE units, if one is on an outage, most of the other units will continue to run, enhancing reliability.

6. The expected forced outage rate of the RICE units is lower than for the CT, which also makes them an inherently more reliable choice.
7. The RICE units will use less water than is required by the CT, which is beneficial both from a cost and use of resources standpoint.
8. There is a lower exposure to capital costs because the RICE facility, even if all seven units are constructed, has a lower overall capital cost than does the CT; meaning that the rate increase to recover the capital cost will be smaller in the case of the RICE facility.
9. The RICE Alternative also can start on its own without outside power input (Blackstart capability), which the CT cannot do.

Advisors witness Rogers came to basically the same conclusions as Mr. Brubaker did with respect to the beneficial characteristics of the RICE Alternative, as contrasted to the CT Alternative.

“With respect to physical parameters of the RICE Alternative, I have the following observations. The economic modeling performed by ENO for the RICE Alternative under the reference gas scenario has the unit operating with a \*\*\*\*\* annual capacity factor; the CT Alternative operates at a higher range with annual capacity factors between \*\*\*\*\* over the study period. Further, a review of the hourly modeling data shows that the CT Alternative, as compared to the RICE Alternative, was dispatched in a less economic operating mode. More precisely, on a relative comparison basis the RICE Alternative had a higher percentage of generation with a generation cost that was below the locational marginal price. While, in MISO a unit operated out of economic dispatch will typically be compensated with make whole payments, the modeling information suggests that the RICE Alternative was more flexible with respect to commitment and dispatch and was a better fit for the generation needs of the region modeled. I believe this is due primarily to the modular nature of the RICE alternative. At any given hour with the RICE Alternative, the facility can be operated with a subset of the seven units producing electricity. That is if MISO only needs 36 MW of generation from NOPS, with the RICE Alternative ENO only needs to turn on two of the engines. On the other hand, the CT alternative would have to be operated at its less efficient practical minimum load of approximately 50% or 110 MW. Accordingly, the RICE Alternative compared to the CT Alternative can more precisely match part load requirements and can most likely be dispatched with the RICE Alternative engines operating at or near their most efficient operating points. Further, at its full load operation, the RICE Alternative has a heat rate that is roughly 18 percent better than the CT Alternative. Accordingly, the RICE

Alternative can be expected to have lower per MWh fuel costs as well as being less susceptible to fuel price risk. (Direct Testimony of Advisors witness Rogers, page 46, line 15 through page 47, line 18.)

While Air Products supports construction of a RICE facility, Air Products strongly encourages the Council not to approve initial construction of all seven of the 18 MW Wartsila units. The evidence clearly indicates that not all of that capacity is needed initially, and may not ever be needed. Air Products recommends building out the infrastructure to accommodate all seven units (in case all seven ultimately are needed) but installing only four or five units now, and deferring the decision on adding other units until a later point in time when they may be justified. This approach has several benefits. First, it reduces the amount of capital outlay and therefore the cost impact on customers. Second, it has the benefit of providing time to learn how energy efficiency measures and general demographic and economic conditions actually will impact ENO's load growth. (See Additional Direct Testimony of Maurice Brubaker, page 10, lines 1-12).

It is very possible that if energy efficiency and demand response efforts are successful under the Energy Smart 2% Savings Program, that load growth will be less than currently forecasted by ENO. Certainly, the recent history of forecasts made by ENO for its system have successively demonstrated lower load forecasts each time that a new forecast is made. Generally see the recent trends in the load forecast recited from pages 7 to 10 of the Direct Testimony of Advisors witness Rogers.

ENO witness Cureington agreed during cross-examination that the capacity from \*\*\*  
\*\*\*\*\* units would be more than sufficient to meet anticipated needs for the next \*\*\*  
\*\*\*\*\* (December 18, 2017 Transcript, page 330, line 7 through page 331, line 19). This can easily be discerned from Exhibit AP No. 3 (appended hereto as Attachment B to this brief) by



subtracting 36 MW (the capacity of 2 Wartsila units) from the bottom line on this schedule. Even by 2027, the surplus would be \*\*\*\*\*.

ENO's primary argument against building fewer than seven units initially is that the average cost per kW is expected to be lower if all seven are built at once. While this may be true, making the larger capital commitment upfront, when there is a great deal of uncertainty about whether the full amount of capacity will be needed anytime soon, imposes on customers higher rates than needed to support current requirements, and perhaps also higher than necessary to support future requirements. Making a higher dollar outlay to purchase more than you need of something, just to get a lower average cost, doesn't make sense in ordinary life, and it doesn't make sense in utility planning either.

If a consumer needs five widgets, it would be better to pay \$10 (\$2 per widget) than to pay \$14 to buy eight at a discounted cost of \$1.75 per widget. This is especially true if the consumer doesn't know if he or she will ever need the three additional widgets. The modular nature of the RICE facility is naturally scalable and reduces risk to the customer, while preserving the option to add to the facility later if, in fact, load growth materializes as currently forecasted.

Because of the modular nature of the RICE facility, four or five units can be installed now, and additional units (if they become needed) can be installed at a later date, at the same location. And if not needed, customers will have been spared the burden of unnecessary costs.

ENO witness Charles Long addressed local reliability needs in his Supplemental and Amending Direct Testimony. In particular, at page 9 of his Supplemental and Amending Direct Testimony, lines 1-11 he stated as follows:

“By 2019, if NOPS is not constructed, several 230 kV and 115 kV lines in DSG would overload without additional transmission investment. In

addition, a Category P6 contingency event would result in severe overloads of several 115 kV lines in the DSG area, leading to **uncontrollable cascading outages** of up to six 115 kV transmission branches. Consequently, a voltage collapse and load shed event in the ENO transmission network would result from the severe reactive power deficit due to the loss of the transmission branches and reactive power support in the ENO transmission grid. Also in 2019, a breaker failure contingency at the Ninemile 230 kV substation was observed to result in three 230 kV transmission line overloads and one 115 kV transmission line overload.” (Emphasis added.)

He also identified the substantial capital investments that would be required if no additional generation capacity is built within the ENO service territory. As shown on page 11 of his Supplemental and Amending Direct Testimony, unless generation capacity is constructed in the ENO service territory, the amount of transmission investment that would be necessary to address reliability concerns exceeds \$50 million. And, this assumes that it would be possible to site these transmission lines in wetlands and heavily populated areas, complicated further by less than desirable soil conditions for construction of transmission infrastructure, which may not even be possible or necessary. And, even if the transmission could be constructed, all it provides is **“wires”**; it doesn’t provide any additional generation resource, and certainly is an inferior way to supply loads in ENO’s load pocket.

Advisors witness Movish came to a conclusion similar to ENO’s. Namely, that construction of capacity within the ENO service territory is far superior to attempting to solve the reliability issues with transmission. In particular, Mr. Movish stated as follows:

“Given ENO’s stated constructability issues and unknowns concerning ENO’s accomplishment of required transmission upgrades needed to mitigate its transmission reliability issues, I conclude that the Transmission Alternative, either with or without the inclusion of 2 percent DSM and solar photovoltaic PV capacity, presents significant reliability risk to New Orleans customers. As noted, to the extent the Council approves proceeding with this option absent the demonstration that it is realistically achievable given the number of unknowns related to the feasibility of constructing needed transmission upgrades, ENO should demonstrate to the Council that its proposed transmission upgrade projects

can be timely constructed, the refined cost of each project, the potential impacts of project delay on ENO's transmission reliability, and the definitive total costs for the alternative prior to final approval.

I conclude that, of the cases modeled, my preferred alternative is construction of the Reciprocating Internal Combustion Engine ("RICE") generator sets ("RICE Alternative"), with or without consideration of 2 percent DSM and solarPV capacity, including the transmission upgrades required to fully mitigate ENO's transmission reliability issues. The RICE Alternative presents the least risk compared to both the CT Alternative and the Transmission Alternative. If selected, the RICE Alternative also would provide other significant benefits to New Orleans, including operational flexibility, dynamic system support for voltage regulation, on-site black start capacity to support restoration of service after a major outage or storm event, and the ability to provide a source of power to ENO's critical loads in the event of an outage. Further, the RICE Alternative, subject to further study, could potentially provide a source of power for the Sewerage & Water Board's ("S&WB") Carrolton facility in the event that S&WB's generation was impaired or inoperable." (Direct Testimony of Philip J. Movish, page 4, line through page 5, line 5).

## **II. Whether Either of ENO's Choices of Technologies is in the Public Interest, and Whether a Full Range of Options Was Considered**

For the reasons recited in the preceding section of this brief, Air Products supports the construction of four or five RICE units at this point in time as necessary to cover ENO's current capacity shortfall, and to provide an acceptable level of local reliability to its customers.

Air Products is not aware of any alternative technology option that would be feasible and should have been considered.

ENO appropriately considered the availability and practicality, as well as the economics, of additional resources, including solar resources, wind resources, and other resources. ENO has chosen to include 50 MW of solar resources in its capacity expansion plan, along with the NOPS unit. This is a reasonable amount of solar generation to be added to the system, but solar is an intermittent resource which is available only at such times as there are normal amounts of sunshine.

Attempts to include larger amounts of solar resources, instead of the RICE units, would subject ENO's customers to an intolerable risk of outages because solar cannot be counted upon fully to perform at times of high system loads.

There are no practically available wind resources that could serve load without substantial amounts of investment in transmission. And, wind resources also are intermittent, and typically have their highest output at night-time in the winter, when it is least needed to serve load. ENO's peak occurs during hot summer days, and wind resources, even if they were practically available and economic, could not be counted upon to fulfill that role.

There have been some comments in this docket about the use of interruptible power as a resource. Air Products is a customer that has part of its load as interruptible. There is no evidence that any other customers are interested in, or capable of taking, interruptible power. Air Products is able to accommodate interruptible power for a portion of its load because the nature of its operations allows for a certain amount of storage. Should interruptions increase beyond the level contemplated in the Large Interruptible Service ("LIS") tariff, it is very possible that Air Products would not be able to tolerate the use of interruptible power, and instead would convert to firm power. (See cross-examination of Air Products witness Brubaker in the December 20, 2017 Transcript, page 179, line 8 through page 180, line 21).

Furthermore, it must be understood that when ENO evaluates its loads and resources, it fully recognizes the interruptible nature of this load, and removes this load from its net load obligation. Thus, the load and capacity statement, which produces the current deficit of about 100 MW, already assumes that Air Products' interruptible load (approximately 20 MW) will be interrupted. If Air Products were not interruptible, ENO's deficit would be about 20 MW higher than what its load and capacity statement already shows.

Construction of a RICE facility is clearly in the public interest because of the reliability need for new generation within the City of New Orleans. The Michoud site was evaluated, among other sites, and determined to be the prime location for new generation because of the interconnections with the ENO transmission network. Construction of a RICE facility would serve the public convenience and necessity, and is in the public interest, and therefore is prudent. Further, it is prudent and just and reasonable within the parameters of the *City of Plaquemine v. the Louisiana Public Service Commission*, 280 So. 2d 440 (1973) and *Federal Power Commission v. Hope Natural Gas Company*, 320 U.S. 591, 660 (1944) and a series of cases citing that decision.

### **III. Whether ENO's Selection of the Michoud Site is Reasonable**

Air Products submits that the Michoud location is the only logical and available choice for siting of the NOPS unit. It has the necessary infrastructure, including the transmission interconnection that is critical to the integration of any generation. As explained by ENO witness Shauna Lovorn-Marriage:

“ENO's activities related to NOPS comply with Resolution R-15-524, which the Council adopted on November 5, 2015 in Docket Nos. UD-13-03 and UD-13-04, wherein the Council approved the proposed settlement terminating the Entergy System Agreement. As a condition of that approval, Resolution R-15-524 directed ENO to “use reasonable diligent efforts to pursue the development of at least 120 MW of new-build peaking generation capacity within the City of New Orleans.”[footnote omitted] That Resolution also emphasizes a commitment for ENO “to use diligent efforts to have at least one future generation facility located in the City of New Orleans.” *Id.* The Project, if approved, would comply with each of these directives from the Council. R-15-524 also directed ENO to, “fully evaluate Michoud or Paterson, along with any other appropriate sites in the City of New Orleans, as the potential site for a combustion turbine (“CT”) or other peaking unit to be owned by ENO.” *Id.* The site selection evaluation that ENO undertook for the Project, which is described in the testimony of ENO's witness Mr. Seth Cureington,

complies with these directives.” (Direct Testimony of Shauna Lovorn-Marriage, page 8, lines 4-19).

#### **IV. Whether ENO’s Proposed Costs, Cost Recovery Mechanism and Monitoring Plan are Just and Reasonable and Should be Approved by the Council**

ENO has been directed by the Council to file what has come to be known as the “Combined” rate case in 2018. Under the normal course of events, rates from this proceeding would become effective in 2019. However, the RICE facility is not expected to become operational until sometime in 2020. ENO, in its direct testimony, requests that it be provided with some form of PPCACR Rider which would apply between the time that the NOPS unit enters commercial service and the time that there is either a full rate case, or an annual Formula Rate Plan (“FRP”) review. ENO was not specific as to the particular cost recovery mechanism that should be incorporated into such a rider.

Advisors witness Prep recommends (page 3, line 11 through page 4, line 11) that the revenue requirement associated with NOPS be treated as a “second” step in a two-step increase that would be developed in the Combined rate case. Essentially, the first set of rates from the Combined rate case would reflect all revenue requirement items except for NOPS, and the second step would layer on the NOPS revenue requirement at such time as the NOPS unit becomes commercially operable.

Although ENO still prefers to have some form of a rider to recover the cost of NOPS, its witness Lovorn-Marriage agreed that either a revised form of rider, or the two-step methodology could be acceptable (December 20, 2017 Transcript, page 50, lines 8-19). Moreover, the combined rate case should be completed before the RICE facility becomes operational.

If a two-step rate increase approach is not followed, but rather the NOPS revenue requirement is to be spread to customer classes through a rider, both Advisors witness Prep and

Air Products witness Brubaker (see Direct Testimony of witness Prep, pages 8 and 9, and Additional Direct Testimony of Air Products witness Brubaker at page 12, lines 8-11) recommend that the increase be applied as an equal percent to base rate revenues.

Advisors witness Prep also agrees with Air Products witness Brubaker that the allocation of fixed generation costs on a kWh basis (as is done in the current PPCACR Rider) is inappropriate and invalid under standard regulatory policies. In particular, Mr. Prep testified as follows at pages 6 and 7 of his Direct Testimony in this matter.

**“Q. PLEASE SUMMARIZE THE APPROPRIATE COST ALLOCATION METHODOLOGIES THAT SHOULD BE CONSIDERED IN ALLOCATING THE FIXED PROJECT COSTS TO CUSTOMER CLASSES.**

- A.** The allocation of fixed project costs should include a recognition of the peak demands plus reserve requirements throughout the year. **An average hourly demand represented by kilowatt hours (“kWh”), as used in ENO’s current Purchased Power Capacity Acquisition Cost Recovery (“PPCACR”) Rider, is a volumetric basis which is inappropriate since it gives no weight to peak demands or the timing of cost incurrence.** Conversely, customer class contributions at the hour of the annual system peak ignore the relative importance of other peak demands throughout the year where the mix of available resources and customer class contributions to those peak demands may vary. There are more innovative approaches to allocating fixed costs that have been used, such as applying weightings to peak demands and combining marginal cost concepts with the allocation of revenue requirements based on embedded or accounting costs. An in-depth examination of all applicable methodologies to allocate fixed costs should be completed for the Council’s consideration in the Combined Rate Case.” (Direct Testimony of Victor Prep, page 6, line 10 through page 7, line 4). (Emphasis added.)

In this regard, it is important to note that the current PPCACR allocates the non-fuel costs of Union Power Station Block 1 and Ninemile 6 across rate classes on a kWh basis. Using the current Fuel Adjustment Clause (“FAC”) by way of illustration, Advisors witness Prep was clear that allocation of fixed costs on a kWh basis, as is currently done in the PPCACR for Union

Power Station and for Ninemile 6, is not cost-based, and is inappropriate. Air Products certainly agrees with Mr. Prep in this regard.

Mr. Brubaker outlined the problems associated with the current application of the PPCACR Rider on pages 10-14 of his Additional Direct Testimony. The non-cost-based PPCACR had its origins in Docket No. UD-11-03, in which the Council approved ENO's participation in the Ninemile 6 unit being constructed by Entergy Louisiana, LLC ("ELL"). In the January 19, 2012 Agreement in Principle ("AIP") entered into in this case, ENO was required to file a class allocation and rate design study to reflect the incorporation of Ninemile 6 into rates. To cover the eventuality that this case might not be concluded prior to the time that Ninemile 6 went into service, a short-term temporary rider was provided for recovery of costs until the new rate case ordered by the Resolution had been processed and new base rates established.

For simplicity and expediency, this rider collected costs on a per kWh basis, which is not cost-based. Although Ninemile 6 went into service at the end of December of 2014, ENO still has not filed the required base rate case, and has chosen to collect the non-fuel costs of Ninemile 6 on a kWh basis. As a result this rider, which was designed to be used on a "temporary" basis, became the vehicle for collection not only of Ninemile 6 costs but also for the collection of Union Power Station non-fuel costs.

Subsequently, in the Algiers docket (Docket No. UD-14-02), a docket in which Air Products had no standing to participate because it supposedly would affect only Algiers customers, ENO and the Advisors agreed that there would be no increase to base rates for either the legacy ENO customers, or the Algiers customers prior to the time that a "Combined rate case" to be filed no later than the first quarter of 2018 had been fully processed. (This date was



subsequently changed to a mid-2018 filing). Air Products effectively was denied due process rights because it had no basis to believe that directives affecting the rates of legacy ENO customers would be made in any docket other than an ENO docket. Had ENO properly processed a base rate case to incorporate the capacity costs of Ninemile 6 into rates, the infamous Ninemile 6 per kWh rider either never would have come into existence, or if it did would have existed only for a brief period of time.

This non-cost-based collection of the non-fuel revenue requirements of Ninemile 6 and Union Power Station produces a massive over-charge to Air Products. This is explained in more detail at pages 13 and 14 of Air Products witness Brubaker's Additional Direct Testimony. More particularly, the kWh allocation under PPCACR charges Air Products for approximately 3.2% of the costs being allocated, whereas a more appropriate allocation on base rates would charge Air Products approximately 1.2% of these costs. Air Products is being charged about \$2.5 million per year of costs under the kWh allocation, when a more appropriate allocation on base rate revenues would charge Air Products approximately \$1 million per year, or \$1.5 million per year less than the kWh-based PPCACR does.

From January 2016 through September 2017, Air Products estimates that it has been charged about \$3 million more than it should have been charged had a more cost-based allocation of costs been in effect. Coupled with an ongoing over-charge of approximately \$1.5 million per year, this places Air Products at a substantial competitive disadvantage with respect not only to other companies, but also with respect to other facilities of Air Products that compete with the New Orleans facility to produce and sell product to its customers.

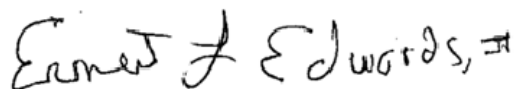
ENO agrees with Advisors witness Prep and with Mr. Brubaker that the current methodology used in the PPCACR is inappropriate and should be realigned. (Rebuttal

Testimony of ENO witness Lovorn-Marriage, page 5, lines 4-11). Air Products also is in agreement conceptually with the need for realignment, but strongly objects to waiting until the processing of the Combined rate case because relief would not then be forthcoming until the middle of 2019, or later, an additional 18-24 months and more than \$2.2 million of additional over-charges to Air Products.

**Given the overwhelming testimony and agreement in this docket that allocation of non-fuel generation costs on a kWh basis is wrong, Air Products contends that the realignment of the Ninemile 6 and Union Power Station non-fuel costs from the PPCACR Rider to collection as an equal percentage of base rates should be accomplished now. Air Products has suffered long enough under this non-cost-based revenue allocation that never should have been allowed to persist. Now is the time for the Council to take action to fix the problem – before it becomes any worse. If that is not possible outside of a rate case, then in the 2018 combined rate case Air Products should be compensated for the overcharges. Air Products already has paid at least \$3 million more than it should have paid for recovery of these costs, and the excess charges continue at the rate of \$1.5 million per year.**

Date: January 19, 2018

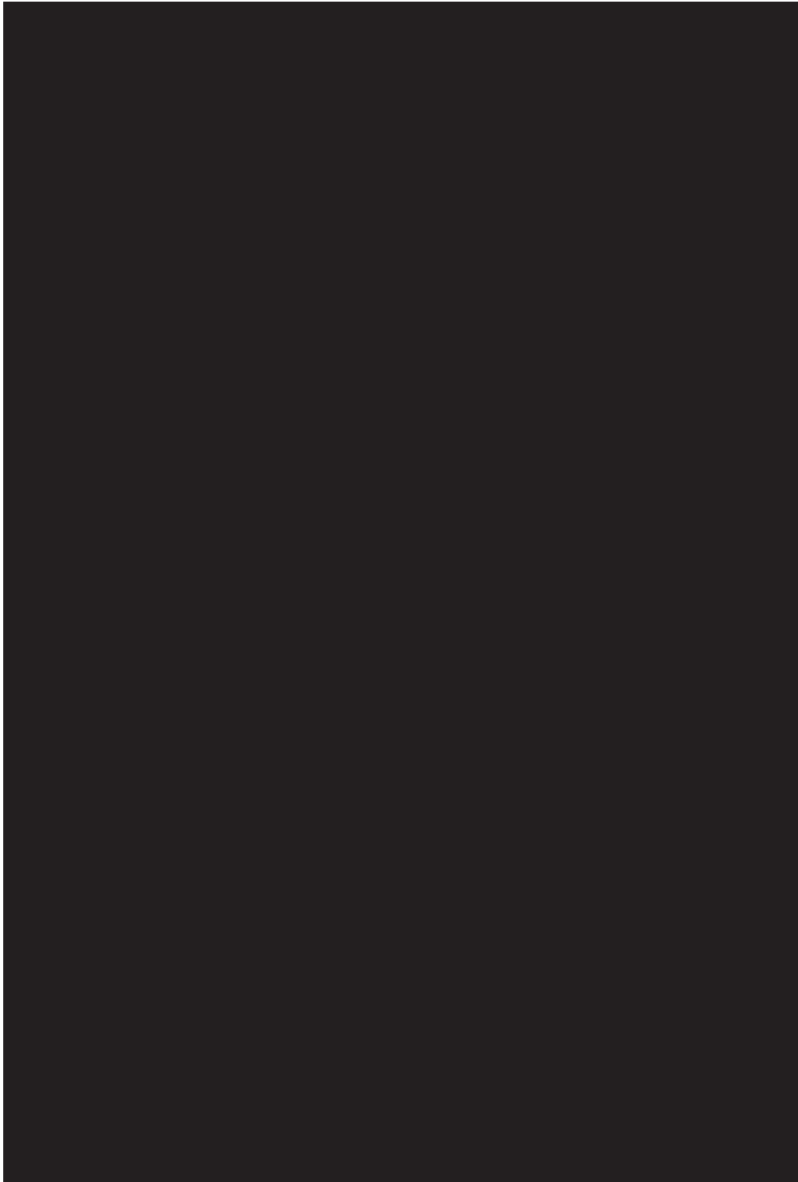
Respectfully submitted,



Ernest L. Edwards, Jr., Esq.  
300 Lake Marina Avenue, Unit 5BE  
New Orleans, LA 70124  
Phone: (504) 450-4226  
Email: [ledwards0526@gmail.com](mailto:ledwards0526@gmail.com)



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**Attachment B to the Brief of  
Air Products and Chemicals, Inc.**



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p 2 of 2