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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

DOUG LITTLE – Chairman
BOB STUMP
BOB BURNS
TOM FORESE
ANDY TOBIN

Arizona Corporation Commission

DOCKETED

AUG 25 2016

DOCKETED BY

IN THE MATTER OF THE APPLICATION
OF TUCSON ELECTRIC POWER
COMPANY FOR APPROVAL OF ITS 2016
RENEWABLE ENERGY STANDARD AND
TARIFF IMPLEMENTATION PLAN

DOCKET NO. E-01933A-15-0239

IN THE MATTER OF THE APPLICATION
OF TUCSON ELECTRIC POWER
COMPANY FOR THE ESTABLISHMENT
OF JUST AND REASONABLE RATES
AND CHARGES DESIGNED TO REALIZE
A REASONABLE RATE OF RETURN ON
THE FAIR VALUE OF THE PROPERTIES
OF TUCSON ELECTRIC POWER
COMPANY DEVOTED TO ITS
OPERATIONS THROUGHOUT THE
STATE OF ARIZONA AND FOR
RELATED APPROVALS.

DOCKET NO. E-01933A-15-0322

NOTICE OF FILING
SURREBUTTAL TESTIMONY
AND EXHIBITS OF MICHAEL D.
MCELRATH ON BEHALF OF
FREEPORT MINERALS
CORPORATION

Freeport Minerals Corporation (“Freeport”), hereby submits the Surrebuttal
Testimony and Exhibits of Michael D. McElrath on behalf of Freeport in the above
captioned Docket.

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RESPECTFULLY SUBMITTED this 25th day of August, 2016.

FENNEMORE CRAIG, P.C.

By: _____



Patrick J. Black
C. Webb Crockett
2394 E. Camelback Road, Suite 600
Phoenix, Arizona 85016
Attorneys for Freeport Minerals
Corporation and Arizonans for Electric
Choice and Competition
pblack@fclaw.com
wcrocket@fclaw.com

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COPY of the foregoing hand-delivered/mailed
this 25th day of August, 2016 to:

Jane L. Rodda
Administrative Law Judge
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Janice M. Alward, Chief Counsel
Legal Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

Thomas Broderick, Director
Utilities Division
Arizona Corporation Commission
1200 West Washington Street
Phoenix, Arizona 85007

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BEFORE THE ARIZONA CORPORATION COMMISSION

IN THE MATTER OF THE APPLICATION
OF TUCSON ELECTRIC POWER
COMPANY FOR APPROVAL OF ITS 2016
RENEWABLE ENERGY STANDARD AND
TARIFF IMPLEMENTATION PLAN

DOCKET NO. E-01933A-15-0239

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COMPANY DEVOTED TO ITS
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STATE OF ARIZONA AND FOR
RELATED APPROVALS.

DOCKET NO. E-01933A-15-0322

Surrebuttal Testimony of Michael D. McElrath
on behalf of
Freeport Minerals Corporation

August 25, 2016

1 Q. PLEASE STATE YOUR NAME, AND BUSINESS ADDRESS.

2 A. Michael D. McElrath, 333 North Central Avenue, Phoenix Arizona.

3 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

4 A. I am employed by Freeport Minerals Corporation ("Freeport") as its Director of
5 Energy Services.

6 Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?

7 A. I am testifying on behalf of Freeport.

8 Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE AND
9 QUALIFICATIONS.

10 A. I have over 40 years of experience in the energy field beginning with 16 years with
11 a natural gas utility with increasing responsibilities in 3 different states. I have
12 worked in the mining industry for 28 years dealing with energy matters for 3
13 different mining companies. Today, I am responsible for the power and natural gas
14 supplies for Freeport's mines in North America, South America and Africa.

15 Q. HAVE YOU TESTIFIED BEFORE THE ARIZONA CORPORATION
16 COMMISSION (THE "COMMISSION") IN OTHER DOCKETS?

17 A. Yes. I have testified in a number of dockets before the Commission beginning in
18 1994.

19 Q. HAVE YOU TESTIFIED BEFORE ANY OTHER PUBLIC UTILITY
20 COMMISSION?

21 A. Yes, I have testified before the Public Utility Regulatory Board in El Paso, Texas,
22 the Public Utility Commission of Colorado and the Federal Energy Regulatory
23 Commission in various dockets over the years.

24 Q. WHAT IS THE PURPOSE OF YOUR SURREBUTTAL TESTIMONY IN
25 THIS PROCEEDING?

26 A. The purpose of my surrebuttal testimony is to first point out to the parties and the

1 Commission how close Tucson Electric Power Company's ("TEP") largest
2 customer, Freeport's Sierrita mine ("Sierrita"), came to shutting down due to low
3 commodity prices, which have still not fully recovered. This demonstrates the
4 urgency for immediate action to reduce power costs that will assist Freeport in
5 continuing to operate Sierrita and provide the enormous economic benefit to Pima
6 County and the state of Arizona. In furtherance of this immediate need, I provide
7 another market option for the Commission to consider in addition to the two joint
8 buy-through proposals detailed in Mr. Kevin Higgins' Surrebuttal Testimony on
9 behalf of Freeport, Arizonans for Electric Choice and Competition ("AECC") and
10 Noble Americas Energy Solutions ("Noble Solutions").

11 As TEP's largest retail customer, Freeport's load at Sierrita – operating at
12 only 75% of capacity – is still larger than the entire program size under AECC's
13 original buy-through proposal, which is sized to be equivalent to the Arizona
14 Public Service Company ("APS") AG-1 buy-through program. Therefore, even if
15 this original buy-through proposal is approved, it might only provide partial access
16 to alternative generation supply for Sierrita, and therefore limit the potential
17 savings Sierrita needs to best reduce its costs.

18 **Q. CAN YOU PLEASE COMMENT ON THE SETTLEMENT AGREEMENT**
19 **THAT WAS FILED CONCERNING THE COMPANY'S REVENUE**
20 **REQUIREMENT? DID FREEPORT SIGN THE SETTLEMENT**
21 **AGREEMENT?**

22 **A.** Yes, but not without much hesitation.

23 **Q. PLEASE EXPLAIN.**

24 **A.** While the Revenue Requirement Settlement Agreement ("Settlement") provides
25 TEP an acceptable return, it does not address several important issues, such as
26 providing Sierrita access to market-based generation that it needs to best manage

1 one of its highest variable costs – electric power. Nonetheless, by resolving a
2 number of revenue-related issues, the Settlement will allow the parties and the
3 Commission to focus on this important issue, as well as cost allocation and a
4 reduction of inter-class subsidies. These are issues that must be resolved if Sierrita
5 is to have its best chance to continue being the economic resource it has been for
6 Pima County and the state of Arizona the past several decades. The stakes are
7 really high for Freeport and the communities it serves.

8 **I. FREEPORT'S SIERRITA MINING OPERATIONS AND ECONOMIC**
9 **IMPACT ON LOCAL ECONOMY.**

10 **A. Background and Overview.**

11 **Q. MR. MCELRATH, PLEASE PROVIDE A SUMMARY OF FREEPORT'S**
12 **SIERRITA MINING OPERATIONS IN PIMA COUNTY.**

13 **A.** Sierrita began operations in 1907 as an underground mine, which was converted to
14 an open pit mine in 1957. In 2015, Freeport employed nearly 1,090 employees,
15 which had a total impact of nearly 3,210 jobs on the Arizona economy. Operating
16 at 75% capacity since January 2016, Sierrita currently employs 740 workers. In
17 2009, Freeport purchased the Twin Buttes copper mine which had ceased
18 operations in 1994. This mine is adjacent to Sierrita, and can provide significant
19 synergies in the Sierrita minerals district, including the potential for expanded
20 mining activities.

21 **Q. HAS AN INDEPENDENT STUDY BEEN CONDUCTED ON THE**
22 **ECONOMIC IMPACT THAT FREEPORT'S SIERRITA MINING**
23 **OPERATIONS HAVE HAD ON THE LOCAL ECONOMY AND THE**
24 **STATE OF ARIZONA?**

25 **A.** Yes. According to a study by the L. William Seidman Research Institute at
26 Arizona State University ("ASU Study"), operations at Sierrita generated an

1 estimated **\$250.7** million in economic benefits for Pima County, and approximately
2 **\$343.6** million for the state of Arizona in 2015 alone. A chart depicting Sierrita's
3 impacts on Pima County and Arizona in 2015 is attached hereto as Exhibit 1.

4 **Q. DID THE STUDY PROVIDE THE AMOUNT OF BUSINESS TAXES**
5 **FREEPORT PAYS TO PIMA COUNTY ANNUALLY?**

6 **A.** Yes it does. Freeport paid nearly \$14 million in business tax to Pima County in
7 2015.

8 **Q. ARE THERE OTHER BENEFITS THAT SIERRITA PROVIDE TO**
9 **RESIDENTS IN PIMA COUNTY BEYOND JOBS, VENDOR PURCHASES**
10 **AND TAXES?**

11 **A.** Most definitely. As a responsible corporate citizen, Freeport engages in and
12 sponsors several community outreach programs and civic events. For instance, in
13 2010 Freeport established the Green Valley/Sahuarita Community Investment
14 Fund, which awarded \$577,000 in grants to various community nonprofit programs
15 (i.e. local schools and food banks) in 2014, and another \$555,000 in 2015.

16 **B. Sierrita – Current Status of Operations.**

17 **Q. HOW CLOSE DID FREEPORT COME TO CLOSING ITS OPERATIONS**
18 **AT SIERRITA?**

19 **A.** Very close. Attached hereto as Exhibit 2 to my surrebuttal testimony are three
20 press releases made between October 2015 and April 2016. Initially, Freeport
21 planned a 50% reduction in operating volume at Sierrita in response to low copper
22 and molybdenum prices and planned a full curtailment of mining and milling
23 operations once a water management system was developed. In January 2016, due
24 to stabilized molybdenum market conditions and improved operating performance,
25 Sierrita revised its planned production curtailment schedule to a 75% curtailment.

26 **Q. IS MANAGEMENT AT TEP AWARE OF HOW CLOSE FREEPORT**

1 **CAME TO SHUTTING DOWN SIERRITA?**

2 A. Yes, but it does not seem to concern TEP enough to make any meaningful buy-
3 through proposal in this rate proceeding to afford Sierrita immediate relief from
4 high rates. Freeport has tried working with TEP to find solutions that could reduce
5 the likelihood of further reductions in operations at Sierrita, but to no avail. It
6 appears that a Commission-mandated solution is our only option at this time.

7 **Q. WHAT IS THE CURRENT STATUS OF SIERRITA?**

8 A. Sierrita is operating at the reduced production rate of 75% of capacity. Freeport
9 continues to carefully monitor operating results and market conditions and future
10 production rate decisions at Sierrita will be based on these factors. Outside of
11 labor costs, energy represents Sierrita's second largest variable operating expense.

12 **Q. DOES ACCESS TO MARKET-BASED ALTERNATIVE GENERATION**
13 **PLAY A ROLE FOR FREEPORT IN DETERMINING WHERE BEST TO**
14 **INVEST THE COMPANY'S RESOURCES?**

15 A. Yes. Freeport's Morenci mine expansion reached full production during Q2 of
16 2015, and Freeport's planned Lone Star development in Safford is progressing.
17 Morenci and Safford are served by Morenci Water & Electric Company
18 ("MW&E"), which is supplied primarily from the competitive generation
19 wholesale market.

20 **Q. TEP HAS PROPOSED AN ECONOMIC DEVELOPMENT RATE ("EDR")**
21 **TO ENHANCE ECONOMIC DEVELOPMENT IN ITS SERVICE**
22 **TERRITORY. WHAT KIND OF INCENTIVES WILL THE EDR PROVIDE**
23 **FREEPORT IN DECIDING WHERE TO MAKE CONTINUED**
24 **INVESTMENTS?**

25 A. Absolutely none. An EDR may have some minimal success in attracting new or
26 expanded operations for commercial and industrial customers, but Sierrita is

1 neither new, nor are operations expanding. Further, EDR savings decline over a
2 short number of years and default into the applicable retail tariff, while mining
3 investments have a much longer horizon. Freeport prefers to have competitive
4 choice in its generation supply as this is a far superior customer tool than an EDR.

5 **Q. DOES FREEPORT HAVE ANY PLANS TO FURTHER REDUCE ITS**
6 **OPERATIONS AT SIERRITA?**

7 **A.** Freeport continues to carefully monitor operating results and market conditions and
8 future production rate decisions will be based on these factors.

9 **Q. SO IF SIERRITA WERE TO COMPLETELY SHUT DOWN**
10 **OPERATIONS, THE LIKELIHOOD IT WOULD BE RE-STARTED IS**
11 **LOW?**

12 **A.** A restart would be dependent on favorable market and operating conditions that
13 would justify the investment of re-establishing the workforce, replace lost
14 equipment and all other expenses associated with bringing a mining operation back
15 into production. I cannot stress enough the importance of providing Sierrita with
16 the tools necessary to manage its energy costs, such as buy-through programs that
17 allow for access to market generation.

18 Every penny counts, and Freeport's decisions concerning where to focus its
19 investment dollars on a world-wide stage can turn on the slightest of margins.

20 **II. CHOICE AND MARKET BASED GENERATION**

21 **A. Background and overview.**

22 **Q. DOES FREEPORT SUPPORT THE IMPLEMENTATION OF CHOICE**
23 **AND COMPETITION IN GENERATION SUPPLY HERE IN ARIZONA?**

24 **A.** Yes. Not only is access to competitive generation the stated public policy of the
25 state of Arizona, but the Arizona Corporation Commission's own Five Year
26 Strategic Plan for 2014-2019 calls "To promote the transition of the

1 telecommunications and *electricity generation markets* from the *current regulated*
2 *monopoly structure to one of competition* while ensuring safe and reliable service.”
3 [Emphasis added]. See Exhibit 3 attached hereto.

4 **Q. HAS THE COMMISSION BEEN PROMOTING A TRANSITION TO**
5 **COMPETITION IN ELECTRICITY GENERATION?**

6 A. The Commission did approve a settlement agreement in APS’ last rate case that
7 included the AG-1 Tariff. However, the Commission has done nothing since to
8 provide large customers access to competitive markets in electricity generation –
9 even on a limited basis – outside of AG-1. In fact, it appears that Arizona is
10 moving in the opposite direction.

11 **Q. CAN YOU BE MORE SPECIFIC REGARDING YOUR CONTENTION**
12 **THAT ARIZONA IS MOVING IN THE OPPOSITE DIRECTION?**

13 A. Certainly. In Docket No. E-00000V-15-0094 [In the Matter of Resource Planning
14 and Procurement in 2015 and 2016], the Commission is considering integrated
15 resource plans (“IRP”) submitted by TEP, APS and UNSE. Each of these
16 regulated utilities’ plans include load growth forecasts, and the need to acquire
17 and/or construct new generation facilities to serve such growth on a long-term
18 basis.

19 As a customer of TEP, Freeport will be expected to pay for the acquisition
20 or construction of new generation facilities that the Commission considers “used
21 and useful” as a result of a rate case, which is a very likely event when
22 “acknowledged” by the Commission as a result of the IRP process. Freeport
23 submitted written comments in the IRP docket arguing that allowing large,
24 sophisticated users to “opt-out” and purchase electricity from the competitive
25 market should be considered as an alternative to new generation. By ensuring that
26 all resource alternatives are considered, including opt-out programs, the

1 Commission can evaluate those that may primarily benefit ratepayer impacts and/or
2 economic growth, and not just the alternatives which primarily support a utility's
3 profits. The IRP process should specifically consider the role that opt-out can play
4 in mitigating the need for supply-side resources.

5 Additionally, increasing regulatory mandates in renewable generation
6 ignores the role that competitive markets can play in promoting growth for the
7 renewable industry. Instead of a mandate that further empowers incumbent utilities
8 to add more costs for consumers, a move to a competitive generation market would
9 allow all classes of customers to choose up to 100% of their generation from
10 renewable energy. Competitive renewable providers could in turn build generation
11 supply to meet this demand. For instance, in his Direct Testimony, Wal-Mart
12 Stores, Inc.'s witness Chris Hendrix testifies that his company would like to
13 purchase more renewables than the amount currently included in TEP's resource
14 mix.¹

15 **Q. BUT HOW WOULD A COMPETITIVE GENERATION MARKET**
16 **AFFECT TEP'S CURRENT GENERATION RESOURCES?**

17 **A.** According to Mr. Hutchens, TEP will have future generation capacity needs of
18 approximately 400MW beginning in 2018.² I am especially interested in his
19 statement that continuing to rely on coal as a primary fuel source is just not a viable
20 long-run strategy for TEP or its customers. Industrial customers like Freeport can
21 complement TEP's long-term strategy to reduce its reliance on coal by an opt-out
22 program, by removing generation load from the equation, thus allowing TEP to
23 accelerate retirement of its coal units without a need to immediately replace them.

24 While this may be an alternative for 2018, Sierrita requires a more immediate

25 ¹ Direct Testimony on Rate Design and Cost of Service of Chris Hendrix, at p. 8.

26 ² Rebuttal Testimony of David Hutchens at p. 9-10.

1 solution for cost savings.

2 **Q. BUT ISN'T RELIANCE ON THE MARKET FOR GENERATION A RISKY**
3 **PROPOSITION FOR LARGE CUSTOMERS?**

4 A. Yes, just as the market can be a risky proposition for TEP. Freeport is a
5 sophisticated user of electricity, with affiliates that include Commission
6 jurisdictional electric utilities and an independent power marketer with FERC
7 Exempt Wholesale Generator status and over 20 years of generation market
8 contracting experience in South America, where competitive generation supply is
9 the rule for industrial customers. The opportunity for Freeport to self-supply its
10 Arizona operations at Sierrita can minimize the risk to TEP's other retail
11 customers, and allow for the alignment of commodity risk profiles to meet
12 Freeport's short and long-term objectives. By contrast, the current misalignment of
13 risks between Freeport's inputs and outputs puts TEP's revenues and the
14 communities Freeport operates in at risk due to further curtailment or closure.
15 Furthermore, as a tariff customer, if Sierrita closes or curtails further – it will also
16 be faced with a demand ratchet of 75% for eleven (11) months afterwards.

17 **Q. DOES FREEPORT HAVE A SPECIFIC PROPOSAL FOR GIVING**
18 **SIERRITA ACCESS TO THE COMPETITIVE GENERATION MARKET?**

19 A. Yes. The solution Freeport is proposing at this time is modeled after the Franchise
20 Agreement (“Agreement”) among Phelps Dodge Safford, Inc. (“PD Safford”),
21 MW&E and Graham County Electric Cooperative, Inc. (“Graham”) regarding
22 electric service to Freeport's mining operations in Safford, Arizona.

23 **III. FRANCHISE AGREEMENT.**

24 **A. Overview of Proposal**

25 **Q. PLEASE SUMMARIZE THE BASIS OF FREEPORT'S PROPOSAL IN**
26 **THIS PROCEEDING.**

1 A. Freeport is proposing to utilize a model already approved by the Commission in
2 2006, which involved Freeport's PD Safford mine, MW&E and Graham County
3 Electric Cooperative, Inc. ("Graham"). That arrangement involved the
4 development of a mine at Safford, Arizona by PD Safford. This mine was located
5 in Graham's service area and the parties entered into a Service Territory Franchise
6 Agreement ("Agreement") which enabled MW&E to provide power to PD Safford
7 for its mining operations. The Agreement was subsequently approved by the
8 Commission on December 21, 2006.

9 **Q. UNDER THE AGREEMENT, WHO PROVIDES OR ARRANGES FOR ALL
10 ELECTRIC TRANSMISSION AND DISTRIBUTION LINES AND
11 SUBSTATIONS FACILITIES REQUIRED IN CONNECTION WITH
12 SERVING PD SAFFORD?**

13 A. PD Safford made arrangements for all facilities to connect the PD Safford
14 distribution system within the transmission system, including metering and
15 communication facilities.

16 **Q. DOES PD SAFFORD OWN, OPERATE AND MAINTAIN THE POWER
17 DISTRIBUTION SYSTEM FACILITIES WITHIN THE PD SAFFORD
18 AREA?**

19 A. Yes.

20 **Q. DID MW&E ARRANGE FOR AN INTERCONNECTION WITH THE
21 ELECTRICAL TRANSMISSION FACILITIES OF SOUTHWEST
22 TRANSMISSION COOPERATIVE?**

23 A. Yes. Those interconnection facilities provided access to wholesale market supplies
24 of power and energy to accommodate PD Safford. MW&E entered into service
25 agreements for both firm and non-firm transmission services from Southwest
26 Transmission.

1 Q. DID THE FRANCHISE AGREEMENT CONTAIN A TERM PERIOD?

2 A. Yes. It was for an initial period of ten years and could continue in effect for
3 subsequent five (5) year extension periods beyond the initial period unless and until
4 terminated by one of the parties providing at least one year and one day written
5 notice in advance of the end of the initial franchise period or any subsequent
6 period.

7 Q. IS THERE ANY FRANCHISE CHARGE TO BE PAID TO GRAHAM BY
8 MW&E?

9 A. Yes.

10 Q. HAVE YOU ATTACHED A FORM THAT COULD BE USED AS A
11 FRANCHISE AGREEMENT IN THIS PROCEEDING?

12 A. Yes. Exhibit 4 could be used as a possible format for a franchise agreement
13 between MW&E and TEP as a result of this proceeding.

14 B. Benefits of a Franchise Agreement

15 Q. WOULD YOU EXPLAIN THE BENEFITS THAT WOULD RESULT FROM
16 THE EXECUTION OF A SIMILAR FRANCHISE AGREEMENT
17 INVOLVING TEP, MW&E AND FREEPORT?

18 A. Yes. I may be repeating some of my earlier comments with the following
19 comments. However, I want to reemphasis the points.

20 First, the arrangement would enable Freeport to purchase power at a
21 competitive market price, which today is much less than TEP's retail generation
22 supply. As I have previously testified, energy is Freeport's second largest variable
23 expense. Freeport sells its commodity products on the world market at market
24 price. It does not set that sales price and can only impact that price by cutting
25 production in low price periods or increasing production in high price periods.
26 Freeport can only work to control its production costs.

1 Second, Freeport's ability to sell its product on the world market, at a price
2 in excess of its production costs, enables it to be able to continue to operate the
3 Sierrita Mine. However, I would like to again point out that Freeport operates a
4 number of mines around the world an on a price per pound of copper produced
5 basis, Sierrita's power costs are among the highest. Sierrita's ability to maintain
6 operations is heavily dependent on its cost structure and energy is a significant
7 component of their costs.

8 Third, by keeping the Sierrita Mine operating, Freeport will:

- 9 1. Continue to be able to employ employees from the Tucson area.
- 10 2. Continue to be able to purchase supplies from merchants in the
11 Tucson area.
- 12 3. Continue to be able to employ services of companies in the Tucson
13 area.
- 14 4. Continue to be able to pay taxes to the County and State.
- 15 5. Continue to be able to provide employees and funds in support of
16 civic and charitable community activities in the Tucson area.

17 Fourth, by keeping costs as low as possible at Sierrita, the mine will still be
18 contributing to TEP's fixed costs. Additionally, TEP would continue to provide
19 electric service and receive revenue from Sierrita employees, as well as Tucson
20 merchants who provide goods and/or services.

21 **Q. SO TO CLARIFY, THE FRANCHISE AGREEMENT OPTION YOU ARE**
22 **SPONSORING TODAY IS IN ADDITION TO THE TWO BUY-THROUGH**
23 **PROGRAM OPTIONS ADDRESSED IN MR. HIGGINS' SURREBUTTAL**
24 **TESTIMONY?**

25 **A.** Yes, Freeport considers a franchise agreement between MW&E and TEP to be a
26 third option for the Commission to consider. The two buy-through proposals

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addressed by Mr. Higgins can be important long-term tools for TEP's commercial and industrial customers to manage costs through market choice and competition. And while the third proposal I make herein provides the most practical relief for Sierrita, nothing does nor should preclude the Commission from taking both a short and long-term approach in transitioning towards a competitive market in generation, as evidenced by its own strategic plan.

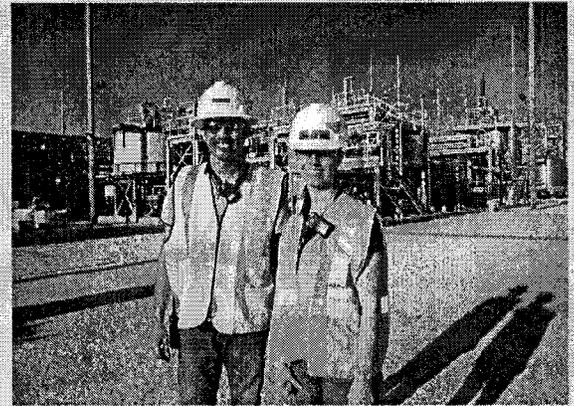
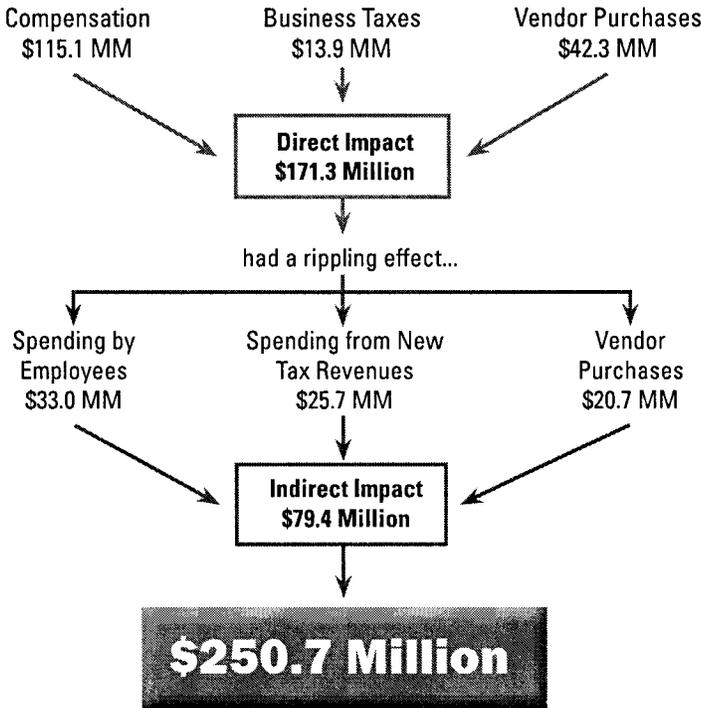
Q: DOES THIS CONCLUDE YOUR TESTIMONY?

A: Yes.

EXHIBIT 1

IMPACT OF SIERRITA OPERATIONS ON THE ECONOMY OF PIMA COUNTY AND ARIZONA – 2015

Sierrita Operations' Impact on Pima County



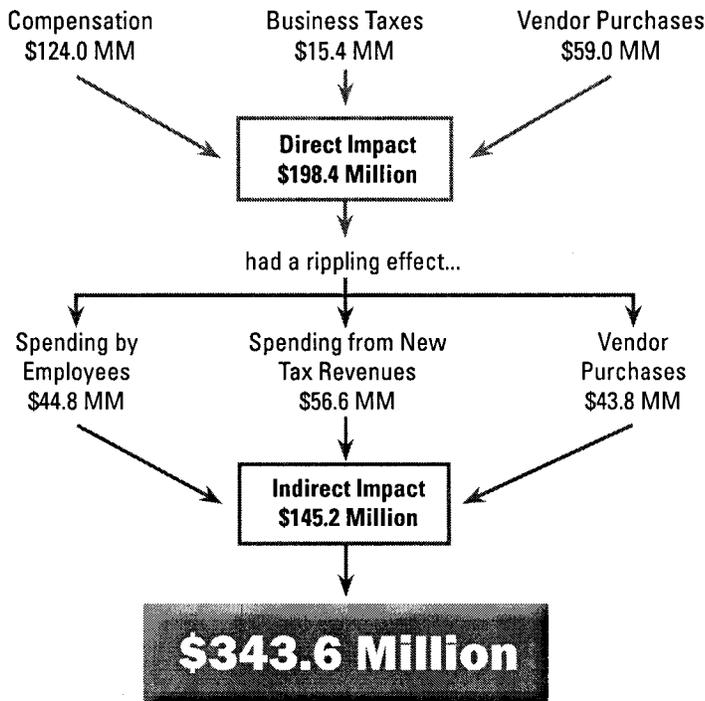
Freeport-McMoRan's Sierrita mine generated an estimated \$250.7 million in economic benefits for Pima County and approximately \$343.6 million for Arizona in 2015.

Freeport-McMoRan contributes in many ways to the sustainability of the various communities, counties and states in which we operate. They rely heavily on the economic benefits directly and indirectly provided by our various operations in the form of wages and taxes we pay as well as the goods and services we purchase. This direct spending ripples through the economy, inducing additional economic benefits and contributing to more jobs and greater tax revenues.

The charts to the left explain how Sierrita provides such a boost to the county and state economies.

Freeport-McMoRan's Sierrita mine had more than 1,090 employees at the end of 2015 and a total impact of nearly 3,210 jobs on Arizona's economy.

Sierrita Operations' Impact on Arizona



All economic impact numbers were produced by the L. William Seidman Research Institute, Arizona State University.

EXHIBIT 2

October 2015



NEWS RELEASE

NYSE:FCX

fcx.com

333 North Central Avenue Phoenix, AZ 85004

Financial Contacts:

Kathleen L. Quirk
(602) 366-8016David P. Joint
(504) 582-4203

Media Contact:

Eric E. Kinneberg
(602) 366-7994

Freeport-McMoRan Reports Third-Quarter and Nine-Month 2015 Results

- **Net loss** attributable to common stock totaled \$3.8 billion, \$3.58 per share, for third-quarter 2015. After adjusting for net charges totaling \$3.7 billion, \$3.43 per share, third-quarter 2015 adjusted net loss attributable to common stock totaled \$156 million, \$0.15 per share.
- **Consolidated sales** totaled 1.0 billion pounds of copper, 294 thousand ounces of gold, 23 million pounds of molybdenum and 13.8 million barrels of oil equivalents (MMBOE) for third-quarter 2015, compared with 1.1 billion pounds of copper, 525 thousand ounces of gold, 22 million pounds of molybdenum and 12.5 MMBOE for third-quarter 2014.
- **Consolidated sales** for the year 2015 are expected to approximate 4.1 billion pounds of copper, 1.2 million ounces of gold, 90 million pounds of molybdenum and 52.7 MMBOE, including 1.1 billion pounds of copper, 310 thousand ounces of gold, 21 million pounds of molybdenum and 13.3 MMBOE for fourth-quarter 2015.
- **Average realized prices** were \$2.38 per pound for copper, \$1,117 per ounce for gold and \$55.88 per barrel for oil (including \$11.03 per barrel for cash gains on derivative contracts) for third-quarter 2015.
- **Consolidated unit net cash costs** for third-quarter 2015 averaged \$1.52 per pound of copper for mining operations and \$18.85 per barrel of oil equivalents (BOE) for oil and gas operations.
- **Operating cash flows** totaled \$822 million (including \$507 million in working capital sources and changes in other tax payments) for third-quarter 2015. Based on current sales volume and cost estimates and assuming average prices of \$2.40 per pound for copper, \$1,150 per ounce for gold, \$5.50 per pound for molybdenum and \$50 per barrel for Brent crude oil for fourth-quarter 2015, operating cash flows are expected to approximate \$3.3 billion for the year 2015. Using similar price assumptions, operating cash flows are expected to approximate \$6.8 billion for the year 2016.
- **Capital expenditures** totaled \$1.5 billion for third-quarter 2015, including \$0.6 billion for major projects at mining operations and \$0.7 billion for oil and gas operations. Capital expenditures are expected to approximate \$6.3 billion for the year 2015, including \$2.5 billion for major projects at mining operations and \$2.8 billion for oil and gas operations. Capital expenditures are expected to approximate \$4.0 billion for the year 2016.
- The **Cerro Verde expansion project** commenced operations in September 2015 and is expected to achieve full rates by early 2016.
- In third-quarter 2015, FCX announced **revised capital and operating plans** in response to market conditions. The revised plans include significant reductions in planned capital expenditures, production curtailments and cost reductions. FCX also announced today additional actions to further curtail copper and molybdenum production.
- FCX has sold 114.8 million shares of its common stock and generated gross proceeds of \$1.2 billion under its **at-the-market equity programs**, including 97.5 million shares and gross proceeds of \$1.0 billion during third-quarter 2015.
- At September 30, 2015, **consolidated debt** totaled \$20.7 billion and **consolidated cash** totaled \$338 million.
- In October 2015, FCX announced it is undertaking a **review of its oil and gas business** to evaluate strategic alternatives designed to enhance value to FCX shareholders and achieve self-funding of the oil and gas business from its cash flows and resources.
- In October 2015, the Indonesian government provided assurances to **PT Freeport Indonesia on its long-term mining rights**.

Third-quarter 2015 consolidated **molybdenum** sales of 23 million pounds approximated the July 2015 estimate and the third-quarter 2014 sales of 22 million pounds.

Third-quarter 2015 sales from oil and gas operations of 13.8 MMBOE, including 9.3 million barrels (MMBbls) of **crude oil**, 22.8 billion cubic feet (Bcf) of **natural gas** and 0.7 MMBbls of **natural gas liquids** (NGLs), approximated the July 2015 estimate of 13.6 MMBOE and were higher than third-quarter 2014 sales of 12.5 MMBOE, primarily reflecting higher volumes in the GOM, partly offset by lower volumes in California.

Consolidated sales for the year 2015 are expected to approximate 4.1 billion pounds of copper, 1.2 million ounces of gold, 90 million pounds of molybdenum and 52.7 MMBOE, including 1.1 billion pounds of copper, 310 thousand ounces of gold, 21 million pounds of molybdenum and 13.3 MMBOE for fourth-quarter 2015. Projected 2015 sales volumes are approximately 130 million pounds of copper and 90 thousand ounces of gold below the July 2015 estimates reflecting revised operating plans and ongoing El Niño weather conditions in Indonesia. With the completion of the Cerro Verde expansion project and access to higher grade ore at Grasberg in 2016, FCX expects sales volumes to approximate 5.2 billion pounds of copper for the year 2016.

Consolidated Unit Costs

Mining Unit Net Cash Costs. Consolidated average unit net cash costs (net of by-product credits) for FCX's copper mines of \$1.52 per pound of copper in third-quarter 2015 were higher than unit net cash costs of \$1.34 per pound in third-quarter 2014, primarily reflecting lower by-product credits, partly offset by lower site production and delivery costs mostly associated with higher volumes in North America.

Assuming average prices of \$1,150 per ounce of gold and \$5.50 per pound of molybdenum for fourth-quarter 2015 and achievement of current sales volume and cost estimates, consolidated unit net cash costs (net of by-product credits) for copper mines are expected to average \$1.52 per pound of copper for the year 2015. Quarterly unit net cash costs vary with fluctuations in sales volumes and average realized prices (primarily gold and molybdenum prices). The impact of price changes for fourth-quarter 2015 on consolidated unit net cash costs would approximate \$0.006 per pound for each \$50 per ounce change in the average price of gold and \$0.003 per pound for each \$2 per pound change in the average price of molybdenum.

Unit net cash costs are expected to decline significantly in 2016, principally reflecting higher anticipated copper and gold volumes. Using the same metals price assumptions and assuming achievement of current sales volume and cost estimates, consolidated unit net cash costs (net of by-product credits) for copper mines are expected to average \$1.15 per pound of copper for the year 2016.

Oil and Gas Cash Production Costs per BOE. Cash production costs for oil and gas operations of \$18.85 per BOE in third-quarter 2015 were lower than cash production costs of \$20.93 per BOE in third-quarter 2014, primarily reflecting lower production costs in California related to reductions in well workover expense and steam costs.

Based on current sales volume and cost estimates for fourth-quarter 2015, cash production costs are expected to approximate \$19 per BOE for the year 2015.

MINING OPERATIONS

North America Copper Mines. FCX operates seven open-pit copper mines in North America - Morenci, Bagdad, Safford, Sierrita and Miami in Arizona, and Chino and Tyrone in New Mexico. All of the North America mining operations are wholly owned, except for Morenci. FCX records its 85 percent joint venture interest in Morenci using the proportionate consolidation method. In addition to copper, molybdenum concentrates and silver are also produced by certain of FCX's North America copper mines.

Operating and Development Activities. FCX has significant undeveloped reserves and resources in North America and a portfolio of potential long-term development projects. In the near term, FCX is deferring developing new projects as a result of current market conditions. Future investments will be undertaken based on the results of economic and technical feasibility studies, and market conditions.

The Morenci mill expansion project commenced operations in May 2014 and successfully achieved full rates in second-quarter 2015. The project expanded mill capacity from 50,000 metric tons of ore per day to approximately 115,000 metric tons of ore per day, which results in incremental annual production of approximately

225 million pounds of copper and an improvement in Morenci's cost structure. Morenci's copper production is expected to average 900 million pounds per year over the next five years.

FCX's revised plans for its North America copper mines incorporate reductions in mining rates to reduce operating and capital costs, including the suspension of mining operations at the Miami mine (which produced 33 million pounds of copper for the first nine months of 2015), a 50 percent reduction in mining rates at the Tyrone mine (which produced 65 million pounds of copper for the first nine months of 2015), a 50 percent reduction in operating rates at the Sierrita mine (which produced 140 million pounds of copper and 17 million pounds of molybdenum for the first nine months of 2015) as well as adjustments to mining rates at other North America mines. The revised plans at each of the operations incorporate the impacts of lower energy, acid and other consumables, reduced labor costs and a significant reduction in capital spending plans. These plans will continue to be reviewed and additional adjustments may be made as market conditions warrant.

Operating Data. Following is a summary of consolidated operating data for the North America copper mines for the third quarters and first nine months of 2015 and 2014:

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2015	2014	2015	2014
Copper (millions of recoverable pounds)				
Production	499	423	1,420	1,203
Sales	483	436	1,441	1,230
Average realized price per pound	\$ 2.42	\$ 3.17	\$ 2.59	\$ 3.19
Molybdenum (millions of recoverable pounds)				
Production ^a	9	8	28	25
Unit net cash costs per pound of copper^b				
Site production and delivery, excluding adjustments	\$ 1.68	\$ 1.83	\$ 1.76	\$ 1.86
By-product credits	(0.12)	(0.26)	(0.15)	(0.25)
Treatment charges	0.12	0.11	0.12	0.11
Unit net cash costs	<u>\$ 1.68</u>	<u>\$ 1.68</u>	<u>\$ 1.73</u>	<u>\$ 1.72</u>

- a. Refer to summary operating data on page 5 for FCX's consolidated molybdenum sales, which includes sales of molybdenum produced at the North America copper mines.
- b. For a reconciliation of unit net cash costs per pound to production and delivery costs applicable to sales reported in FCX's consolidated financial statements, refer to the supplemental schedules, "Product Revenues and Production Costs," beginning on page XIV which are available on FCX's website, "fcx.com."

North America's consolidated copper sales volumes of 483 million pounds in third-quarter 2015 were higher than third-quarter 2014 sales of 436 million pounds, primarily reflecting higher milling rates and ore grades at Morenci and Chino, and higher ore grades at Safford. North America copper sales are estimated to approximate 1.95 billion pounds for the year 2015, compared with 1.66 billion pounds in 2014.

Average unit net cash costs (net of by-product credits) for the North America copper mines were \$1.68 per pound of copper in both the third quarters of 2015 and 2014, with favorable impacts from higher volumes offset by lower by-product credits. Average unit net cash costs (net of by-product credits) for the North America copper mines are expected to approximate \$1.70 per pound of copper for the year 2015, based on current sales volume and cost estimates and assuming an average molybdenum price of \$5.50 per pound for fourth-quarter 2015. North America's average unit net cash costs for fourth-quarter 2015 would change by approximately \$0.004 per pound for each \$2 per pound change in the average price of molybdenum.

January 2016



NEWS RELEASE

333 North Central Avenue Phoenix, AZ 85004

Financial Contacts:

Kathleen L. Quirk
(602) 366-8016

David P. Joint
(504) 582-4203

Media Contact:

Eric E. Kinneberg
(602) 366-7994

Freeport-McMoRan**Reports Fourth-Quarter and Year Ended December 31, 2015 Results**

- **Net loss** attributable to common stock totaled \$4.1 billion, \$3.47 per share, for fourth-quarter 2015 and \$12.2 billion, \$11.31 per share, for the year 2015. After adjusting for net charges totaling \$4.1 billion, \$3.45 per share, for fourth-quarter 2015 and \$12.1 billion, \$11.23 per share, for the year 2015, adjusted net loss totaled \$21 million, \$0.02 per share, for fourth-quarter 2015 and \$89 million, \$0.08 per share, for the year 2015.
- **Consolidated sales** totaled 1.15 billion pounds of copper, 338 thousand ounces of gold, 20 million pounds of molybdenum and 13.2 million barrels of oil equivalents (MMBOE) for fourth-quarter 2015 and 4.07 billion pounds of copper, 1.25 million ounces of gold, 89 million pounds of molybdenum and 52.6 MMBOE for the year 2015.
- **Consolidated sales** for the year 2016 are expected to approximate 5.1 billion pounds of copper, 1.8 million ounces of gold, 73 million pounds of molybdenum and 57.6 MMBOE, including 1.1 billion pounds of copper, 200 thousand ounces of gold, 19 million pounds of molybdenum and 12.4 MMBOE for first-quarter 2016.
- **Average realized prices** were \$2.18 per pound for copper, \$1,067 per ounce for gold and \$48.88 per barrel for oil (including \$11.39 per barrel for cash gains on derivative contracts) for fourth-quarter 2015.
- **Consolidated unit net cash costs** averaged \$1.45 per pound of copper for mining operations and \$16.17 per barrel of oil equivalents (BOE) for oil and gas operations for fourth-quarter 2015. Consolidated unit net cash costs are expected to average \$1.10 per pound of copper for mining operations and \$15 per BOE for oil and gas operations for the year 2016.
- **Operating cash flows** totaled \$612 million for fourth-quarter 2015 and \$3.2 billion (including \$0.4 billion in working capital sources and changes in other tax payments) for the year 2015. Based on current sales volume and cost estimates and assuming average prices of \$2.00 per pound for copper, \$1,100 per ounce for gold, \$4.50 per pound for molybdenum and \$34 per barrel for Brent crude oil, operating cash flows for the year 2016 are expected to approximate \$3.4 billion (net of \$0.6 billion in idle rig costs).
- **Capital expenditures** totaled \$1.3 billion for fourth-quarter 2015 (including \$0.6 billion for major projects at mining operations and \$0.5 billion for oil and gas operations) and \$6.35 billion for the year 2015 (including \$2.4 billion for major projects at mining operations and \$3.0 billion for oil and gas operations). Capital expenditures for the year 2016 are expected to approximate \$3.4 billion, including \$1.4 billion for major projects at mining operations and \$1.5 billion for oil and gas operations, and excluding \$0.6 billion in idle rig costs.
- In response to further weakening in market conditions in fourth-quarter 2015 and early 2016, FCX today **announced additional initiatives to accelerate its debt reduction plans** and is actively engaged in discussions with third parties regarding potential transactions. These initiatives follow a series of actions taken during 2015 to reduce costs and capital spending to strengthen FCX's financial position.
- Since August 2015, FCX has sold 210 million shares of its common stock and generated gross proceeds of approximately \$2 billion under its **at-the-market equity programs**.
- At December 31, 2015, **consolidated debt** totaled \$20.4 billion and **consolidated cash** totaled \$224 million. At December 31, 2015, FCX had no amounts drawn under its \$4.0 billion credit facility.

Fourth-quarter 2015 sales from oil and gas operations of 13.2 MMBOE, including 9.0 million barrels (MMBbls) of **crude oil**, 21.5 billion cubic feet (Bcf) of **natural gas** and 0.6 MMBbls of **natural gas liquids** (NGLs), approximated the October 2015 estimate and were higher than fourth-quarter 2014 sales of 12.1 MMBOE, primarily reflecting higher volumes in the GOM, partly offset by lower volumes in California.

Consolidated sales for the year 2016 are expected to approximate 5.1 billion pounds of copper, 1.8 million ounces of gold, 73 million pounds of molybdenum and 57.6 MMBOE, including 1.1 billion pounds of copper, 200 thousand ounces of gold, 19 million pounds of molybdenum and 12.4 MMBOE in first-quarter 2016. Anticipated higher grades from Grasberg in the second half of 2016 are expected to result in approximately 55 percent of consolidated copper sales and 75 percent of consolidated gold sales to occur in the second half of the year.

Consolidated Unit Costs

Mining Unit Net Cash Costs. Consolidated average unit net cash costs (net of by-product credits) for FCX's copper mines of \$1.45 per pound of copper in fourth-quarter 2015 were lower than unit net cash costs of \$1.47 per pound in fourth-quarter 2014, primarily reflecting lower site production and delivery costs mostly associated with higher sales volumes and the impacts of revised operating plans, partly offset by lower by-product credits.

Unit net cash costs for 2016 are expected to decline significantly from 2015, principally reflecting higher anticipated copper and gold volumes, the impact of lower energy and other input costs, and cost reduction initiatives. Assuming average prices of \$1,100 per ounce of gold and \$4.50 per pound of molybdenum for 2016 and achievement of current sales volume and cost estimates, consolidated unit net cash costs (net of by-product credits) for copper mines are expected to average \$1.10 per pound of copper for the year 2016. Quarterly unit net cash costs vary with fluctuations in sales volumes and average realized prices (primarily gold and molybdenum prices). The impact of price changes on 2016 consolidated unit net cash costs would approximate \$0.015 per pound for each \$50 per ounce change in the average price of gold and \$0.015 per pound for each \$2 per pound change in the average price of molybdenum.

Oil and Gas Cash Production Costs per BOE. Cash production costs for oil and gas operations of \$16.17 per BOE in fourth-quarter 2015 were lower than the cash production costs of \$21.93 per BOE in fourth-quarter 2014, primarily reflecting higher volumes in Deepwater GOM, and lower maintenance and repair costs in both Deepwater GOM and California. Based on current sales volume and cost estimates, cash production costs are expected to approximate \$15 per BOE for the year 2016. Lower cash production costs in 2016 primarily reflect increased production from the Deepwater GOM and cost reduction efforts.

MINING OPERATIONS

North America Copper Mines. FCX operates seven open-pit copper mines in North America - Morenci, Bagdad, Safford, Sierrita and Miami in Arizona, and Chino and Tyrone in New Mexico. All of the North America mining operations are wholly owned, except for Morenci. FCX records its 85 percent joint venture interest in Morenci using the proportionate consolidation method. In addition to copper, molybdenum concentrates and silver are also produced by certain of FCX's North America copper mines.

Operating and Development Activities. FCX has significant undeveloped reserves and resources in North America and a portfolio of potential long-term development projects. In the near term, FCX is deferring developing new projects as a result of current market conditions. Future investments will be undertaken based on the results of economic and technical feasibility studies and market conditions.

The Morenci mill expansion project, which commenced operations in May 2014, successfully achieved full rates in second-quarter 2015. The project expanded mill capacity from 50,000 metric tons of ore per day to approximately 115,000 metric tons of ore per day, which results in incremental annual production of approximately 225 million pounds of copper and an improvement in Morenci's cost structure. Morenci's copper production is expected to average approximately 900 million pounds per year over the next five years.

FCX's revised plans for its North America copper mines incorporate reductions in mining rates to reduce operating and capital costs, including the previously announced suspension of mining operations at the Miami mine (which produced 43 million pounds of copper for the year 2015), planned shutdown of the Sierrita mine (which produced 189 million pounds of copper and 21 million pounds of molybdenum for the year 2015), 50 percent reduction in mining rates at the Tyrone mine (which produced 84 million pounds of copper for the year 2015) and adjustments to mining rates at other North America mines. The revised plans at each of the operations incorporate

April 2016

333 North Central Avenue Phoenix, AZ 85004

Financial Contacts:

 Kathleen L. Quirk
 (602) 366-8016

 David P. Joint
 (504) 582-4203

Media Contact:

 Eric E. Kinneberg
 (602) 366-7994

Freeport-McMoRan Reports First-Quarter 2016 Results

- **Net loss** attributable to common stock totaled \$4.2 billion, \$3.35 per share, for first-quarter 2016. After adjusting for net charges totaling \$4.0 billion, \$3.19 per share, first-quarter 2016 adjusted net loss attributable to common stock totaled \$197 million, \$0.16 per share.
- **Consolidated sales** totaled 1.1 billion pounds of copper, 201 thousand ounces of gold, 17 million pounds of molybdenum and 12.1 million barrels of oil equivalents (MMBOE) for first-quarter 2016, compared with 960 million pounds of copper, 263 thousand ounces of gold, 23 million pounds of molybdenum and 12.5 MMBOE for first-quarter 2015.
- The **Cerro Verde expansion project** reached full production capacity in first-quarter 2016, and Cerro Verde is on track to produce over 1 billion pounds of copper for the year 2016.
- **Consolidated sales** for the year 2016 (adjusted for the anticipated closing of the Morenci transaction in second-quarter 2016) are expected to approximate 5.0 billion pounds of copper, 1.85 million ounces of gold, 71 million pounds of molybdenum and 54.4 MMBOE, including 1.15 billion pounds of copper, 195 thousand ounces of gold, 19 million pounds of molybdenum and 13.5 MMBOE for second-quarter 2016.
- **Average realized prices** were \$2.17 per pound for copper, \$1,227 per ounce for gold and \$29.06 per barrel for oil for first-quarter 2016.
- **Consolidated unit net cash costs** averaged \$1.38 per pound of copper for mining operations and \$15.85 per barrel of oil equivalents (BOE) for oil and gas operations for first-quarter 2016. Consolidated unit net cash costs for the year 2016 are expected to average \$1.05 per pound of copper for mining operations and \$15 per BOE for oil and gas operations.
- **Operating cash flows** totaled \$740 million (including \$188 million in working capital sources and changes in other tax payments) for first-quarter 2016. Based on current sales volume and cost estimates and assuming average prices of \$2.25 per pound for copper, \$1,250 per ounce for gold, \$5 per pound for molybdenum and \$45 per barrel for Brent crude oil for the remainder of 2016, operating cash flows for the year 2016 are expected to approximate \$4.8 billion (including \$0.8 billion in working capital sources and changes in other tax payments).
- **Capital expenditures** totaled \$982 million for first-quarter 2016, consisting of \$459 million for mining operations (including \$350 million for major projects) and \$523 million for oil and gas operations. Capital expenditures are expected to approximate \$3.3 billion for the year 2016, consisting of \$1.8 billion for mining operations (including \$1.4 billion for major projects) and \$1.5 billion for oil and gas operations.
- At March 31, 2016, **consolidated debt** totaled \$20.8 billion and **consolidated cash** totaled \$331 million. At March 31, 2016, FCX had \$3.0 billion available under its \$3.5 billion credit facility.
- During first-quarter 2016, FCX entered into agreements to **sell an additional 13 percent ownership in Morenci** and to **sell an interest in the Timok exploration project in Serbia** for aggregate consideration of \$1.3 billion. In addition, in April 2016, FCX entered into an agreement to **sell certain oil and gas royalty interests** for \$0.1 billion. These transactions are expected to close in second-quarter 2016.
- FCX continues to **advance discussions for the sale of certain interests in its mining and oil and gas assets** to accelerate its debt reduction initiatives. FCX expects to achieve additional progress during second-quarter 2016.

Consolidated sales for the year 2016 are expected to approximate 5.0 billion pounds of copper, 1.85 million ounces of gold, 71 million pounds of molybdenum and 54.4 MMBOE, including 1.15 billion pounds of copper, 195 thousand ounces of gold, 19 million pounds of molybdenum and 13.5 MMBOE for second-quarter 2016. Projected consolidated copper sales have been adjusted for the anticipated closing of the Morenci transaction in second-quarter 2016. Anticipated higher grades from Grasberg in the second half of 2016 are expected to result in approximately 55 percent of consolidated copper sales and 80 percent of consolidated gold sales to occur in the second half of the year.

Consolidated Unit Costs

Mining Unit Net Cash Costs. Consolidated average unit net cash costs (net of by-product credits) for FCX's copper mines of \$1.38 per pound of copper in first-quarter 2016 were lower than unit net cash costs of \$1.64 per pound in first-quarter 2015, primarily reflecting higher copper sales volumes in South America and the impact of ongoing cost reduction initiatives.

Assuming average prices of \$1,250 per ounce of gold and \$5 per pound of molybdenum for the remainder of 2016 and achievement of current sales volume and cost estimates, consolidated unit net cash costs (net of by-product credits) for copper mines are expected to average \$1.05 per pound of copper for the year 2016. The impact of price changes for the remainder of 2016 on consolidated unit net cash costs would approximate \$0.015 per pound for each \$50 per ounce change in the average price of gold and \$0.01 per pound for each \$2 per pound change in the average price of molybdenum. Quarterly unit net cash costs vary with fluctuations in sales volumes and realized prices primarily for gold and molybdenum.

Oil and Gas Cash Production Costs per BOE. Cash production costs for oil and gas operations of \$15.85 per BOE in first-quarter 2016 were lower than cash production costs of \$20.26 per BOE in first-quarter 2015, primarily reflecting increased production from the Deepwater Gulf of Mexico (GOM) and ongoing cost reduction efforts.

Based on current sales volume and cost estimates, cash production costs are expected to approximate \$15 per BOE for the year 2016.

MINING OPERATIONS

North America Copper Mines. FCX operates seven open-pit copper mines in North America - Morenci, Bagdad, Safford, Sierrita and Miami in Arizona, and Chino and Tyrone in New Mexico. In addition to copper, molybdenum concentrate and silver are also produced by certain of FCX's North America copper mines.

All of the North America mining operations are wholly owned, except for Morenci. FCX records its 85 percent joint venture interest in Morenci using the proportionate consolidation method. In February 2016, FCX entered into a definitive agreement to sell an additional 13 percent joint venture interest in Morenci, which is expected to close in second-quarter 2016.

Operating and Development Activities. FCX has significant undeveloped reserves and resources in North America and a portfolio of long-term development projects. In the near term, FCX is deferring development of new projects as a result of current market conditions. Future investments will be undertaken based on the results of economic and technical feasibility studies, and market conditions.

During 2015, FCX's revised plans for its North America copper mines to incorporate reductions in mining rates to reduce operating and capital costs, including the suspension of mining operations at the Miami mine, a transitioned suspension of production at the Sierrita mine, a 50 percent reduction in mining rates at the Tyrone mine and adjustments to mining rates at other North America mines. The revised plans at each of the operations incorporate the impacts of lower energy, acid and other consumables, reduced labor costs and a significant reduction in capital spending plans. These plans continue to be reviewed and additional adjustments will be made as market conditions warrant.

EXHIBIT 3

ARIZONA CORPORATION COMMISSION

Strategic Plan 2014—2019

Five Year Strategic Plan

FY2013 – FY2018



MISSION STATEMENT

- ④ Exercise exclusive state regulatory authority over public service corporations (public utilities) in the public interest;
- ④ Grant corporate status and maintain public records;
- ④ Ensure the integrity of the securities marketplace; and
- ④ Foster the safe operation of railroads and gas pipelines in Arizona.

ARIZONA CORPORATION COMMISSION

Strategic Plan 2014—2019

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ARIZONA CORPORATION COMMISSION

Strategic Plan 2014—2019

Goals (cont.)

Information Technology

1. To provide electronic interaction effectively with the public and other governmental entities. In addition, to implement effective protocols, software, and communication with the public to allow them to retrieve and submit data, forms, and all other documents.
2. To use information technologies effectively to enhance intra-agency Communications.
3. To improve employees' preparation to use technology and react to their job-specific needs.

Legal

1. To provide efficient, high-quality legal representation.
2. To provide high-quality representation in administrative matters before the Corporation Commission
3. To provide high-quality representation in Judicial matters before various courts.
4. To provide high-quality legal advice to the Commission.

Safety

Railroad

1. To promote and ensure the safe operation of Arizona railroads.
2. To ensure rail/highway grade crossings safety.

Pipeline

1. To protect the public and the environment by providing the highest level of pipeline safety awareness
2. To ensure the pipeline operators in Arizona operate gas pipeline systems as safely as possible.
3. To receive and maintain an interagency agreement with the Federal Dept. of Transportation to ensure safe operations of interstate pipeline.
4. To maintain and improve the professional skills of the ACC pipeline staff.

Securities

1. To ensure that registered securities offered to public investors are structured fairly and equitably and fully disclose all information necessary for an investor to make an informed decision.
2. To reduce the public investor losses and protect Arizona's reputation from damage caused by fraudulent sales and services peddled to victims by unlicensed and unregistered frauds.
3. Continue to monitor the integrity of the investment marketplace to allow for enhanced capitol formation while deterring and adjudicating fraudulent practices.

Utilities

1. To ensure that utility service within the Commission's jurisdiction is available to all consumers at authorized rates.
2. To promote the transition of the telecommunications and electricity generation markets from the current regulated monopoly structure to one of competition while ensuring safe and reliable service.
3. To maximize the Division's operating efficiency through modernization of electronic processing and enhancing the Division's information technology.
4. To maintain public involvement, accessibility, and regulatory oversight by conducting workshops, forums, and community outreach programs.

EXHIBIT 4

SERVICE TERRITORY FRANCHISE AGREEMENT

AMONG

FREEPORT-McMoRan SIERRITA INC.

THE MORENCI WATER AND ELECTRIC COMPANY

AND

TUCSON ELECTRIC POWER COMPANY

SERVICE TERRITORY FRANCHISE AGREEMENT

This SERVICE TERRITORY FRANCHISE AGREEMENT (Franchise Agreement) is entered into this ____ day of _____, 2016, by and among Freeport-McMoRan Sierrita Inc. (Sierrita), The Morenci Water and Electric Company (MW&E) and Tucson Electric Power Company (TEP). Sierrita is a Delaware corporation which is a wholly-owned subsidiary of the Freeport Minerals Corporation and which is authorized and licensed to do business in the State of Arizona. MW&E is a wholly-owned subsidiary of Freeport Minerals Corporation, organized and existing under the laws of the State of Arizona. TEP is a wholly-owned subsidiary of Fortis Inc. organized and existing under the laws of the State of Arizona. Sierrita, MW&E and TEP are referred to collectively herein as the "Parties".

WHEREAS, MW&E has been granted a certificate of convenience and necessity (CC&N) to provide utility services in the vicinity of Morenci, Arizona in Greenlee County;

WHEREAS, Sierrita has an active mining and milling operation on lands owned or controlled by it in the area west of the community of Green Valley, Arizona ("Sierrita Mine");

WHEREAS, TEP has been granted a CC&N to construct electric transmission and distribution facilities and deliver electricity within certain portions of Pima County, including the site of the Sierrita Mine (TEP Service Territory);

WHEREAS, TEP has existing 138kV electric transmission service to the existing Sierrita Mine and Sierrita owns a 138kV substation to deliver energy required to serve the Sierrita Mine;

WHEREAS, Sierrita prefers that the electric power and energy to be consumed within the Sierrita Mine be provided by or through MW&E; and

WHEREAS, TEP is willing to provide a franchise right to MW&E (i) to use existing TEP facilities necessary to supply energy and (ii) to supply energy to be consumed only within certain boundaries of the Sierrita Mine (such boundaries are precisely identified on Exhibit A hereto and are referred to herein as the "Freeport-McMoRan Sierrita Area") in exchange for the consideration set forth in this Franchise Agreement;

NOW, THEREFORE, in consideration of the premises set forth above and for other good and valuable consideration, the receipt and sufficiency of which the Parties hereby acknowledge, the Parties mutually agree as follows:

Section 1. Effective Date.

This Franchise Agreement shall be effective upon its execution by the Parties (Effective Date), subject to the receipt of a final, non-appealable order of the Arizona Corporation Commission (ACC) specifying its approval. TEP shall promptly submit this Franchise Agreement to the ACC for its approval. Sierrita and MW&E shall provide all necessary assistance to TEP in seeking ACC approval. Should the ACC reject the Franchise Agreement or require as a

condition of approval of the Franchise Agreement any material changes or material modifications that are unacceptable to any Party, the Parties shall negotiate in good faith to attempt to modify, within 60 days of receipt of notice of such rejection or unacceptable requirement(s), this Franchise Agreement so as to attempt to secure the approval of the ACC.

Section 2. Termination.

After the Effective Date, this Franchise Agreement shall remain in effect for a period of ten (10) years and shall continue in effect for subsequent five (5) year extension periods beyond the Initial Franchise Period, unless and until terminated by a Party, as follows:

This Franchise Agreement may be terminated by Sierrita and MW&E or by TEP as of the end of the calendar year of the Initial Franchise Period or at the end of any subsequent five (5) year extension period that has occurred after the end of the Initial Franchise Period (Subsequent Period).

To exercise its right to terminate this Franchise Agreement, Sierrita and MW&E or TEP shall provide written notice to the other(s) at least one year and one day in advance of the end of the Initial Franchise Period or any Subsequent Period.

Upon termination of this Franchise Agreement, all rights of MW&E to construct, operate and maintain electric facilities and provide power and energy within the Freeport-McMoRan Sierrita Area shall cease. MW&E shall not be required to relinquish ownership of any facilities that have been constructed for the purpose of serving the Sierrita MW&E Loads.

Section 3. Franchise Agreement.

For the term of this Franchise Agreement and with respect to the Freeport-McMoRan Sierrita Area, excluding the loads existing within the Freeport-McMoRan Sierrita Area that are currently served from TEP's two (2) distribution circuits located within the Freeport-McMoRan Sierrita Area and any expansions of such loads, TEP grants to MW&E the rights to:

- 3.1 Firm transmission capacity on the existing TEP electric transmission facilities required to serve the Sierrita MW&E Loads;
- 3.2 Construct, own, operate and maintain a transmission line or lines connecting the Sierrita MW&E Loads with other transmission system(s); and
- 3.3 Secure power and energy for delivery over the facilities referred to in Sections 3.1 and 3.2, which shall comprise the Sierrita Electric System, to which all Sierrita MW&E Loads shall be connected.

Such rights on the terms granted by this Agreement shall extend only to the boundaries of the Freeport-McMoRan Sierrita Area and neither Sierrita nor MW&E shall by any action including,

but not limited to, the filing of an application with the ACC seek to extend or modify the boundaries of the Freeport-McMoRan Sierrita Area or the terms of this Agreement. Sierrita and MW&E expressly acknowledge that (i) a material inducement and consideration for TEP to enter into this Franchise Agreement is its right and ability to continue to serve loads outside the Freeport-McMoRan Sierrita Area and; (ii) any breach of this condition would cause immediate, irreparable harm not compensable solely by monetary damages which may be redressed by equitable relief. Nothing herein, however, shall restrict MW&E's ability to extend its CC&N in areas which are outside of the TEP Service Territory.

Section 4. Services to be Provided.

4.1 For the Freeport-McMoRan Sierrita Area, MW&E shall provide the following:

4.1.1 All arrangements for the metering and communications equipment required to monitor and bill for the Franchise Charge associated with the demand and energy passing through the TEP 138kV Delivery Point to the Sierrita 138kV substation, which TEP metering and communications equipment already exist; and

4.1.2 All arrangements needed to deliver power and energy over transmission systems from the source of such power and energy for the Sierrita MW&E Loads.

4.2 For the Freeport-McMoRan Sierrita Area, TEP shall provide the following:

4.2.1 Firm transmission capacity across the TEP system for the delivery of power and energy for the the Sierrita Mine.

Section 5. Franchise Charge.

So long as this Franchise Agreement is in effect, TEP shall bill to MW&E and MW&E shall pay TEP monthly in accordance with Section 6 a monthly franchise charge determined as follows (Franchise Charge):

5.1 In the Initial Franchise Period, the Franchise Charge shall be the applicable of

The Franchise Charge shall be an amount determined as the product of the Franchise Fee of _____ (TBD) multiplied by the demand/energy of the Sierrita MW&E Load as metered at the TEP 138kV Delivery Point.

Section 6. Billing and Payment.

Each billing period shall be one (1) calendar month (Billing Month). For each Billing Month, the following shall apply:

- 6.1 Based upon metered data, pursuant to Section 4. I .2, supplied by TEP, TEP shall bill MW&E with a copy to Sierrita on or before the fifteenth (15th) day of the month following the Billing Month for the Franchise Charge. MWE shall have the right to observe monthly meter reads and/or to request and receive data verifying the amount of demand and energy metered at the TEP 138kV Delivery Point. The meter(s) maintained at the TEP 138kV Delivery Point shall be tested for accuracy at TEP's expense at least annually and MWE shall have the right to attend such meter tests.
- 6.2 MW&E shall pay TEP the total of the monthly charge by the later of the 20th day of the month or ten (10) days after receipt of the bill. Failing timely payment of the monthly charge by MW&E, Sierrita shall be obligated to pay TEP on the terms specified herein.
- 6.3 MW&E shall electronically wire transfer funds to a bank of TEP's choice or transmit funds by any other method which provides collected funds on or before payment due date. Amounts not paid by the due date shall be payable by Sierrita or MW&E with interest accrued on each calendar day from the due date to the date of payment. Interest shall accrue at a rate of: (i) the then-effective prime commercial lending rate per annum published in the Money Rates section of The Wall Street Journal, or (ii) in the event the interest rate provided for herein should at any time exceed the maximum rate that may be so legally charged, the maximum rate that may be legally charged by TEP. Should The Wall Street Journal discontinue publication of the prime commercial lending rate, the Parties shall endeavor to agree on an acceptable substitute.
- 6.4 In the event any portion of any bill is disputed by MW&E, the disputed amount shall be paid, under protest, when due. If the protested portion of the payment is found to be incorrect, TEP shall promptly cause to be refunded to the paying party, either Sierrita or MW&E, any amount due, including interest accrued on each calendar day from the date of payment to the date the refund check is mailed by TEP. The same interest rate and computation method shall be applied to the determination of interest due herein as provided in Section 6.3.
- 6.5 In the event, as a result of a meter test or otherwise, a Party determines that any metered data is incorrect beyond a limit of one percent (1%) fast or slow, the Franchise Charges for the previous six (6) months, but not to exceed such six (6) month period, shall be presumed to be incorrect as billed and paid (unless demonstrated to the contrary). In such event, TEP and MW&E shall estimate the correction necessary for such metered data to be no more than one percent (1%) inaccurate and additional payment shall be made or amounts refunded, as appropriate, to adjust for such incorrect metered data for such six (6) month period, without interest.
- 6.6 No payment made to or received by TEP pursuant to this Section 6 shall constitute a waiver of any right of Sierrita, MW&E or TEP to contest the

correctness of any monthly charge by TEP or metered data supplied by TEP; provided, however, that any bill rendered by TEP shall become final and non-contestable if protest is not received or made by TEP within six (6) months of the bill date.

- 6.7 TEP shall mail or send by telephone facsimile transmission or other electronic means any bills and refunds to Sierrita's or MW&E's billing address as designated from time to time in writing by Sierrita or MW&E.

Section 7. Notices.

Except only as herein otherwise expressly provided, any notice, demand or request provided for in this Franchise Agreement, or served, given or made in connection with it, shall be in writing and shall be deemed properly served, given or made if delivered in person or by any other qualified and recognized delivery service, or sent by United States mail postage prepaid to the persons specified below:

To: Freeport-McMoRan Sierrita Inc.
Director Energy Services
333 North Central Avenue
Phoenix, Arizona 85004

To: The Morenci Water & Electric Company
President
P.O. Box 68
Morenci, Arizona 85540

To: Tucson Electric Power Company
P. O. Box 77
Tucson, Arizona 85702

Any Party may at any time, by written notice to the other Party, change the designation or address of the person so specified as the one to receive notices pursuant to this Franchise Agreement.

Section 8. Entire Agreement.

The complete agreement of the Parties is set forth in this Franchise Agreement and all prior communications, whether written or oral, are hereby abrogated and withdrawn.

Section 9. Amendments.

This Franchise Agreement may be amended by, and only by, a written instrument duly executed by each Party.

Section 10. Waivers.

The waiver by any Party of any breach of any term, covenant or condition contained herein shall not be deemed a waiver of any other term, covenant or condition or any subsequent breach of the same or any other term, covenant or condition contained herein.

Section 11. Regulatory Authority and Governmental Authority.

The effectiveness of this Franchise Agreement is subject to its approval by the ACC. Once so approved, the Parties intend that the rates, charges, terms and conditions of service under this Franchise Agreement shall remain in effect unless changed by the mutual agreement of the Parties.

Section 12. Information Exchange.

The Parties shall cooperate in the exchange of information between themselves in order to further the purposes of this Franchise Agreement and to verify compliance with the terms of this Franchise Agreement.

Section 13. Representations and Warranties.

13.1 TEP represents, warrants and covenants to Sierrita and MW&E as follows:

13.1.1 TEP is an electric utility duly organized, validly existing and in good standing under the laws of the State of Arizona and has corporate power and authority to execute and deliver this Franchise Agreement and perform each obligation hereunder, and to carry on its business as such business is now being conducted and as it is contemplated hereunder that it will be conducted during the term hereof.

13.1.2 The execution, delivery and performance of this Franchise Agreement by TEP has been duly and effectively authorized by all requisite corporate action.

13.2 Freeport-McMoRan Sierrita Inc. represents, warrants and covenants to TEP as follows:

13.2.1 Sierrita is a corporation duly organized and validly existing and in good standing under the laws of the State of Delaware and authorized to do business in the State of Arizona and has the power and authority to execute and deliver this Franchise Agreement and to perform its obligations hereunder, and to carry on its business as it is now being

conducted and as it is contemplated hereunder to be conducted during the term hereof.

13.2.2 The execution, delivery and performance of this Franchise Agreement by Freeport-McMoRan Sierrita Inc. has been duly and effectively authorized by all requisite corporate action.

13.3 MW&E represents, warrants and covenants to TEP as follows:

13.3.1 MW&E is a corporation duly organized and validly existing and in good standing under the laws of the State of Arizona and has the power and authority to execute and deliver this Franchise Agreement and to perform its obligations hereunder, and to carry on its business as it is now being conducted and as it is contemplated hereunder to be conducted during the term hereof.

13.3.2 The execution, delivery and performance of this Franchise Agreement by MW&E has been duly and effectively authorized by all requisite corporate action.

Section 14. Successors and Assigns.

No Party shall assign its interest in the Franchise Agreement in whole or part without the prior written consent of the other Party. Such consent shall not be unreasonably withheld.

Section 15. Governing Law.

This Franchise Agreement shall be governed and construed in accordance with the laws of the State of Arizona, without giving effect to its conflict of law principles. Jurisdiction shall be in Arizona state courts and venue shall be in the County of Pima.

Section 16. Miscellaneous.

16.1 Counterparts. This Franchise Agreement may be executed in any number of counterparts, and all of which when taken together shall constitute one and the same instrument. The Parties hereto may execute this Franchise Agreement by signing any such counterpart.

16.2 Binding Effect. This Franchise Agreement shall be binding upon the Parties, and their respective successors and assigns.

16.3 Signatures. The signatories hereto represent that they have been appropriately authorized to enter into this Franchise Agreement on behalf of the Party for whom they sign.

IN WITNESS WHEREOF, the undersigned have duly executed this Franchise Agreement as of the date first set forth herein.

TUCSON ELECTRIC POWER COMPANY

By: _____

Its: _____

ATTEST: _____

Dated: _____

FREEPORT-MCMORAN SIERRITA, INC.

By: _____

Its: _____

ATTEST: _____

Dated: _____

THE MORENCI WATER & ELECTRIC COMPANY

By: _____

Its: _____

ATTEST: _____

Dated: _____

EXHIBIT A

FREEPORT-McMoRAN SIERRITA AREA