

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

**VERIFIED PETITION OF INDIANA)
MUNICIPAL POWER AGENCY ("IMPA"))
FOR COMMISSION APPROVAL TO)
ASSUME THE OBLIGATION OF CERTAIN)
JURISDICTIONAL IMPA MEMBERS TO)
PURCHASE ENERGY AND CAPACITY)
OFFERED BY A QUALIFYING FACILITY)
PURSUANT TO 170 IAC 4-4.1-5(A))**

CAUSE NO. 44898

VERIFIED PREFILED DIRECT TESTIMONY

OF

LAWRENCE A. BROWN

1 **Q1. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A1. My name is Lawrence A. Brown, and my business address is 11610 N. College Avenue,
3 Carmel, Indiana, 46032.

4 **Q2. WHO IS YOUR EMPLOYER?**

5 A2. I am employed by the Indiana Municipal Power Agency ("IMPA"), located at the above
6 address.

1 **Q3. WHAT IS YOUR POSITION AND WHAT ARE YOUR RESPONSIBILITIES**
2 **WITH IMPA?**

3 A3. As Vice President, Resource Planning, I am responsible for power supply planning,
4 member rates, budgets and member billing at the Agency.

5 **Q4. PLEASE STATE YOUR EDUCATIONAL BACKGROUND AND DESCRIBE**
6 **YOUR EMPLOYMENT EXPERIENCE.**

7 A4. I have a Bachelor's of Science degree in Engineering Management from Purdue
8 University. I have more than thirty years of experience in the electric industry and am a
9 registered Professional Engineer in the State of Indiana. I began my professional career
10 as a Principal Engineer at the Indiana Utility Regulatory Commission. Next, I worked as
11 Manager of Rates and Planning and then Manager of Market Operations at IMPA for
12 over twelve years. I was then employed at ACES Power Marketing for seven years as
13 Structuring Manager. In 2008, I returned to IMPA in my current position.

14 **Q5. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

15 A5. Yes. Most recently, in Cause Nos. 43566-MISO5 and 43566-PJM4, I testified in support
16 of the request of the IMPA Member cities of Anderson, Crawfordsville, Frankfort,
17 Kingsford Heights, Knightstown, Lebanon, Richmond and Tipton's municipal electric
18 utilities' petition for approval of Retail Demand Response Riders. In the 1980s while
19 serving as a Principal Engineer at the Commission, I testified in numerous electric
20 regulatory proceedings, including Cause Nos. 37414, 37812, 37938, 38045, 38163,
21 38193, 38219-S1, and 40254.

22 **Q6. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

1 A6. I will discuss: (1) how IMPA will assume and uphold its Jurisdictional Members'
2 obligations to purchase power from Qualifying Facilities ("QF Purchases") under the
3 Public Utility Regulatory Policies Act of 1978 ("PURPA"); (2) the interrelationship
4 between the Commission's Cogeneration Rules (found at 170 IAC 4-4.1) and IMPA's
5 obligations under PURPA; and (3) why IMPA's methodology for calculating rates for QF
6 Purchases are reasonable, nondiscriminatory and consistent with PURPA.

7 **Q7. UNDER WHAT AUTHORITY DOES IMPA PROPOSE TO ASSUME ITS**
8 **JURISDICTIONAL MEMBERS' OBLIGATIONS TO PURCHASE POWER**
9 **FROM QFs?**

10 A7. The Commission's Cogeneration Rules provide that "[i]f a utility purchases all of its
11 power from a single supplier, such that its avoided cost, as defined in this rule, is derived
12 from the single supplier, the supplier may assume the obligation to purchase the energy
13 and capacity offered by a qualifying facility." 170 IAC 4-4.1-5. This is consistent with
14 FERC's longstanding policy that an all-requirements customer's avoided cost (here, the
15 Member's cost) is that of its all-requirements supplier (or IMPA). Because all of IMPA's
16 members purchase all of their power from a single supplier (IMPA), it is appropriate
17 under the Commission's Cogeneration Rules for IMPA to assume the PURPA Purchase
18 Obligations of its Jurisdictional Members.

19 **Q8. WHAT IS THE INTERRELATIONSHIP BETWEEN THE COMMISSION'S**
20 **COGENERATION RULES AND PURPA AS IT RELATES TO IMPA?**

21 A8. Because IMPA is not included in the definition of an "electric utility" under 170 IAC 4-
22 4.1-2, the Commission's Cogeneration Rules do not apply to IMPA. Accordingly, it is

1 worth noting that upon assuming the PURPA Purchase Obligations of its Jurisdictional
2 Members, IMPA will not operate in accordance with those provisions, including but not
3 limited to the following:

4 170 IAC 4-4.1-4 – Filing of rate data

5 170 IAC 4-4.1-8 – Rate calculation for energy purchases from QFs

6 170 IAC 4-4.1-9 – Rate calculation for capacity purchases from QFs

7 170 IAC 4-1-10 – Filing of standard offer

8 170 IAC 4-1-11 – Filing of standard contract

9 Instead, IMPA will follow the requirements of PURPA in establishing rates for QF
10 Purchases.

11 **Q9. PLEASE EXPLAIN HOW IMPA WILL COMPLY WITH PURPA'S**
12 **REQUIREMENTS FOR ESTABLISHING RATES FOR QF PURCHASES.**

13 A9. PURPA Section 210(b) states that purchase price rates must be just and reasonable and in
14 the public interest. As such, IMPA cannot discriminate against cogenerators or small
15 power producers through its rate structure or interconnection requirements. Under
16 Section 292.101(b)(6) and the Commission's rules, QF rates must equal the utility's full
17 avoided costs, meaning the incremental costs to the utility of energy or capacity, or both,
18 which, but for the purchase from the QFs, the utility would generate itself or purchase
19 from another source. 170 IAC 4-4.1-1(e). Under PURPA, states are not permitted to set
20 rates above full avoided costs.

21 **Q10. HOW WILL IMPA CALCULATE AVOIDED COSTS?**

1 A10. IMPA will calculate avoided costs based on the market cost of capacity and energy.
2 IMPA operates in both the Midcontinent Independent System Operator (“MISO”) and
3 PJM Interconnection (“PJM”) Regional Transmission Operator (“RTO”) territories.
4 Avoided costs are determined by calculating the marginal cost of serving the next
5 increment of load. IMPA’s avoided costs can be determined for capacity and energy
6 based on current constructs utilized in the RTOs. Capacity will be priced at the cleared
7 Module-E zonal auction price in MISO, or the base residual auction reliability pricing
8 model (“RPM”) price in PJM, or successor capacity constructs in those RTOs. By its
9 very definition, Locational Marginal Pricing (“LMP”) is the marginal cost of serving the
10 next increment of load. Avoided energy costs will be priced at the Day-Ahead/Real-
11 Time LMP for the load zone in which the QF resides.

12 **Q11. GIVEN THAT IMPA WILL BASE ITS AVOIDED COSTS ON RTO MARKET**
13 **PRICES, IS IT NECESSARY FOR IMPA TO FILE RATE DATA WITH THE**
14 **COMMISSION UNDER 170 IAC 4-4.1-4.**

15 A.11 No. First, as I noted above, 170 IAC 4-4.1-4 does not apply to IMPA. Moreover, all
16 RTO pricing data and auction results are fully documented, publicly available and
17 published on the RTO websites and, thus, annual filing is unnecessary.

18 **Q12. WHY IS IT UNNECESSARY FOR IMPA TO FILE A STANDARD CONTRACT**
19 **OFFER WITH THE COMMISSION?**

20 A12. In addition to the fact that IMPA is not subject to 170 IAC 4-4.1-10, IMPA has not
21 included a form of contract in its PURPA Plan since the purchases and sales rates will be
22 calculated pursuant to the standard purchase rate (as determined by IMPA’s avoided

1 cost), identified by tariff, or negotiated on a case-by-case basis. However, IMPA and the
2 authorizing Members intend to require a contract be executed by each QF to provide
3 detailed terms and conditions including interconnection requirements, metering, rates,
4 and those terms necessary to accommodate safety and reliability concerns.

5 **Q13. HOW IMPA WILL ASSURE THAT ITS QF RATES ARE REASONABLE AND**
6 **NONDISCRIMINATORY?**

7 A13. IMPA's definition of avoided costs is identical to that in PURPA and the Commission's
8 rules. By calculating its avoided costs based on the independently administered, auction-
9 based wholesale RTO markets, the Commission and QFs will be assured that the rates
10 IMPA charges are reasonable and nondiscriminatory. In addition, if needed, IMPA is
11 able to negotiate contract rates that accommodate the specific needs of a QF on an
12 individual basis.

13 **Q14. WHY IS IT UNNECESSARY FOR THE COMMISSION TO RETAIN**
14 **JURISDICTION OF PETITIONS FOR RESOLUTION OF DISPUTES UNDER**
15 **170 IAC 4-4.1-12?**

16 A14. At a fundamental level, 170 IAC 4-4.1-12 does not apply to IMPA because IMPA is not
17 an "electric utility" as defined by the Cogeneration Rules. Accordingly, disputes about
18 the actual avoided-cost determinations will be litigated before FERC or an applicable
19 federal court. Additional state regulatory oversight would be duplicative.

20 **Q15. HOW WILL IMPA'S PURCHASES FROM QF FACILITIES BE REFLECTED IN**
21 **IMPA'S INTEGRATED RESOURCE PLAN?**

1 A15. Any QF contracts IMPA enters will be treated as resources in IMPA's modeling. This is
2 more appropriate than treating the QFs as load reduction because IMPA will be able to
3 model them as following the RTO price signals. By paying RTO prices to the QF, the
4 QF will have no effect on IMPA's costs – IMPA simply pays the QF dollars that
5 previously would have been paid to the RTOs.

6 **Q16. HOW DOES IMPA'S PROPOSED MARKET-BASED AVOIDED COST**
7 **CALCULATION COMPARE WITH THE RATE FOR ENERGY AND**
8 **CAPACITY PURCHASES AS CALCULATED UNDER 170 IAC 4-4.1-8 AND -9?**

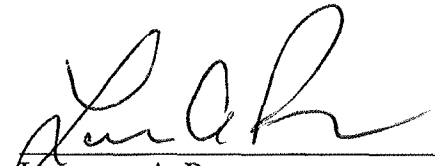
9 A16. Capacity purchases under 170 IAC 4-4.1-9 are essentially based on the long-term cost of
10 a new combustion turbine. Likewise, most RTO constructs are set up so that the
11 maximum auction clearing price is limited to near (or slightly higher than) the cost of a
12 new combustion turbine (in unconstrained zones). In an RTO, the true avoided cost of
13 capacity is the actual auction clearing price because if a utility needs one more MW of
14 load, the utility would pay that auction price, not the cost of a new combustion turbine.
15 Energy purchases under 170 IAC 4-4.1-8 and under LMP in an RTO would likely be very
16 similar. By using the RTO LMP which is the incremental cost of the next MWh, IMPA
17 will essentially be using the same methodology as the IURC rules, except on a regional
18 scale instead of a utility specific scale. Given current gas and coal prices, it is likely the
19 LMP would be similar to the rule's calculated rate except for hourly volatility.

20 **Q17. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

21 A17. Yes.

VERIFICATION

I affirm under the penalties of perjury that the facts stated in the foregoing testimony are true to the best of my information and belief.



Lawrence A. Brown