

# Complaints Filed by Industrial Customers of Indiana Utilities

*Jupiter Aluminum Case Study*

**Scott R. Storms**  
**Chief Administrative Law Judge**  
**Indiana Utility Regulatory Commission**  
**October 6, 2006**  
**Indianapolis, Indiana**

# Jupiter Aluminum Corporation v. Northern Indiana Public Service Company

## *Case Study Background*

- On April 9, 2003, Jupiter Aluminum Corporation filed a Complaint against Northern Indiana Public Service Company (“NIPSCO”), seeking refunds and other affirmative relief regarding NIPSCO’s alleged failure to provide reasonable and adequate electric service to Jupiter’s facility in Hammond, Indiana.



# Basis of Complaint

- In its Complaint, Jupiter indicated that that, from 1995 until the time the Complaint was filed, NIPSCO provided inadequate electric service that resulted in frequent electricity outages that significantly disrupted Jupiter's manufacturing business.
- Jupiter further contended that NIPSCO, despite knowledge of these outage problems, failed to take steps to correct the problems.

# Relief Requested by Jupiter

- In its Complaint, Jupiter requested that NIPSCO be ordered to make a backup line available to Jupiter and otherwise take measures necessary to ensure adequate service to the company.
- Jupiter also requested that the Commission find that NIPSCO overcharged Jupiter by charging it firm rates but providing interruptible service, and order NIPSCO to refund the difference.

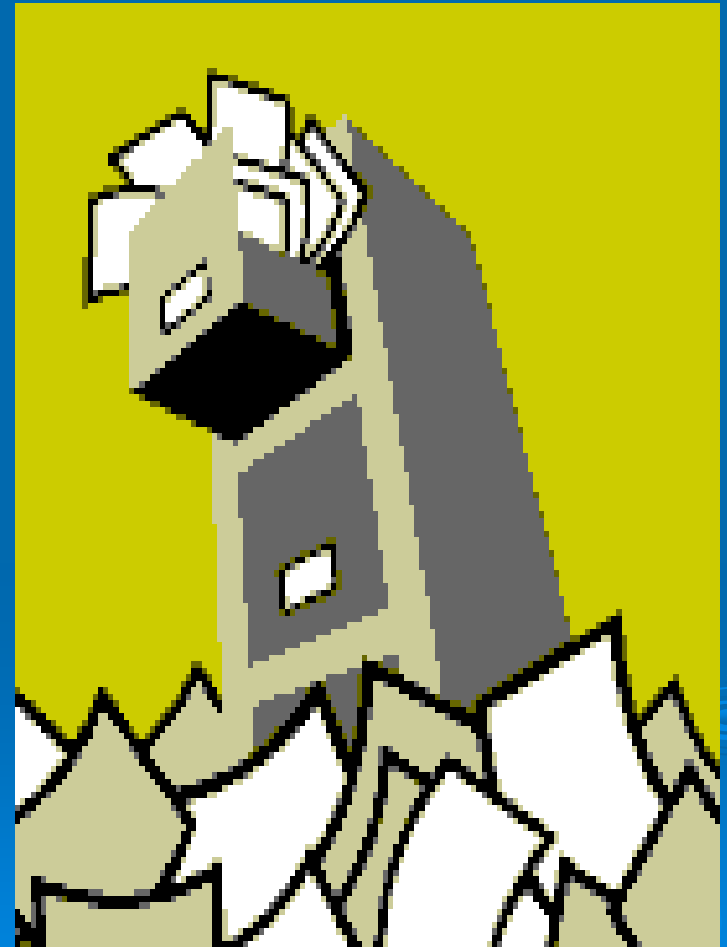


# Outages Issue

- At the Evidentiary Hearing Jupiter offered testimony that it suffered outages on at least 46 dates since April of 1995, lasting from a few minutes to several hours.
- According to Jupiter, even brief outages cause all of its manufacturing equipment to stop operating and restarting the manufacturing equipment takes approximately four hours to complete.
- Jupiter indicated that the outages resulted in lost production time and caused Jupiter to be late in filling customer orders.

# NIPSCO Response

- NIPSCO indicated that power quality meters were installed in 1999 and removed in 2000, but that the electronic data from those tests was no longer available.
- NIPSCO attempted to explain the cause of Jupiter's outages by indicating that:
  - the outages reported by Jupiter were due to a failure of Jupiter's equipment;
  - or that there may have been a drop in voltage on the NIPSCO system that caused Jupiter's manufacturing process to shut down, due to the very sensitive nature of Jupiter's manufacturing equipment and operations.



# NIPSCO Response

- NIPSCO was unable to find any one cause of the outages suffered by Jupiter, and was not aware of any report that addressed the causes of outages not caused by the weather or human-caused outages (e.g., a car hitting a pole).
- No independent studies performed with regard to outages for Jupiter or for Circuit 3409.



# NIPSCO's Proposed Resolution

- NIPSCO proposed that Jupiter install automatic switching equipment. Jupiter considered this option and found it to be unreasonable because:
  - The switching equipment was designed to provide power to only one piece of equipment, and not the remainder of Jupiter's manufacturing equipment;
  - There was no guarantee that the switch to the backup power source would occur quickly enough to solve Jupiter's outage problems; and
  - NIPSCO sought to impose a cost on Jupiter for the proposed switching equipment of \$800,000.00.



# Alternative Feed Solution with Switching Mechanism

- NIPSCO testified that if an adequately sized alternative feed was available:
  - A conventional transfer from the primary circuit to the alternative feed would take about 30 seconds;
  - An automatic high-speed switching mechanism could perform the switch in a second or less, and
  - Newer technology could automatically switch from one source to another in less than one cycle (or a matter of milliseconds).

# Interim Order

- The Commission indicated that NIPSCO should have done a better job in working with its customer to resolve the issues presented in the Complaint and shared Jupiter's frustration with NIPSCO's inability or unwillingness to resolve ongoing issues at the Jupiter facility.
- The Commission also expressed concern over the lack of data regarding the quality of power provided outside, and inside, Jupiter's facility and indicated that further investigation to determine the source of the difficulties at the Jupiter facility was warranted prior to any ruling being made on the issues presented.

# Interim Order

## ➤ Preparation of Initial and Final Reports

- Initial Report was required to allow the Commission to monitor the progress of NIPSCO's efforts to fully evaluate the power quality aspects of circuit 3409 from the Roxanna substation to Jupiter's facility.
- Final Report was also required and was to include the additional steps NIPSCO believes are necessary, or have been taken either by NIPSCO or Jupiter, to ensure that quality service is provided to the Jupiter facility.
- Following an examination of the power quality on the circuit, the parties could move forward to discuss issues regarding the possible use of an alternate feed or backup line, and evaluate power quality issues internal to Jupiter's facility.

# Final Order

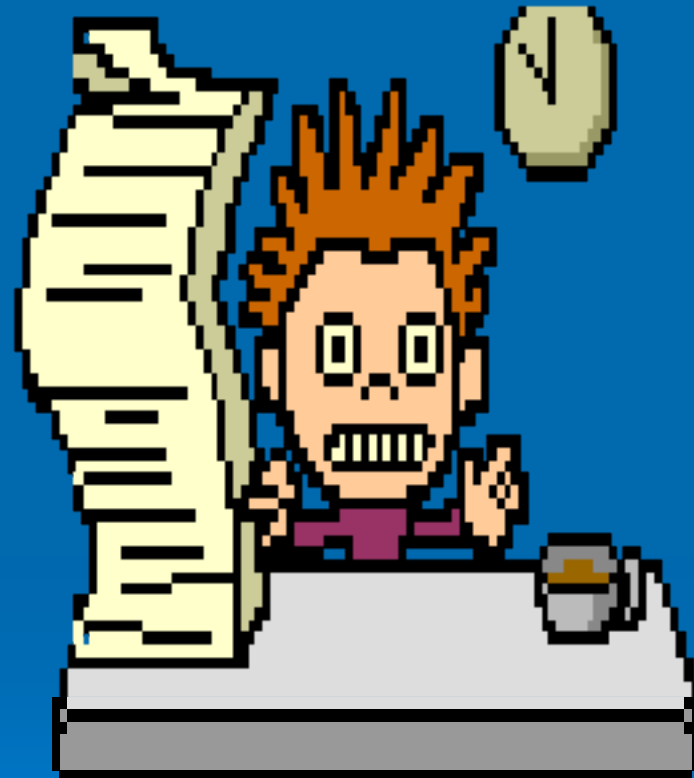
- NIPSCO indicated in its Initial and Final Reports that numerous issues were the cause of the chronic problems faced by the Jupiter facility over the past several years. According to NIPSCO, outages and voltage sags were the result of a variety of system faults including weather, vehicle collisions, static line failure, pole repair, cable failure, neighbor line interference, and 138kV equipment failure.
- The Commission found that NIPSCO's investigation into Jupiter's power quality problems resulted in an Initial and Final Report that--in many respects--simply recommend that NIPSCO perform basic maintenance that it should have been doing all along in an effort to remedy the outages suffered by Jupiter.

# Requirements in Final Order

- The Commission found that an equitable and appropriate resolution of the proceeding was as follows:
  - NIPSCO shall provide a backup line capable of providing the 4160 voltage power requirement complying with NIPSCO's Power Quality Standard ER 16-600-A, from the Roxanna substation (or another substation if NIPSCO determines this is necessary to fully address the issues presented in this Cause). NIPSCO shall be responsible for all costs associated with the installation of the backup line.
  - The Commission also required NIPSCO to pay \$2.5 million dollars to Jupiter Aluminum to cover the costs associated with the purchase and installation of a fast static switch capable of automatically switching power in less than one cycle in the event of a power outage or voltage fluctuation.

# Appeal of Final Order

- Matter is currently pending before the Indiana Court of Appeals
- A second Complaint has been filed by Jupiter Aluminum and is pending before the Commission



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