IN THE UNITED STATES DISTRICT COURT FOR THE SOUTHERN DISTRICT OF FLORIDA

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ATLAS IP, LLC,	
Plaintiff,	Civil Action No.:
v.	
TECO ENERGY, INC., a Florida corporation, TAMPA ELECTRIC COMPANY, a Florida corporation, and NEW MEXICO GAS COMPANY, a Delaware corporation,	DEMAND FOR JURY TRIAL
Defendants.	

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Atlas IP, LLC ("Atlas") brings this action and makes the following allegations of patent infringement relating to U.S. Patent No. 5,371,734 ("the '731 Patent") against Defendants TECO Energy, Inc., Tampa Electric Company, and New Mexico Gas Company (collectively, "Defendants") as follows:

NATURE OF ACTION

1. This is a claim for patent infringement arising under the patent laws of the United States, Title 35 of the United States Code.

THE PARTIES

- 2. Atlas IP, LLC is a limited liability company organized and existing under the laws of the State of Florida, having a principal place of business at One SE Third Avenue, Suite 200, Miami, Florida 33131.
- 3. Defendant TECO Energy, Inc. ("TECO") is a Florida corporation having a principal place of business at 702 N. Franklin Street, Tampa, FL 33602. TECO is the parent company of Defendant Tampa Electric Company, a Florida corporation operating an electricity

utility and having a place of business at 702 North Franklin Street, Tampa, Florida 33602, and of Defendant New Mexico Gas Company, a Delaware company operating a gas company and having a place of business at 7120 Wyoming Blvd., Suite 20, Albuquerque, NM 87102.

JURISDICTION AND VENUE

- 4. This action arises under the patent laws of the United States, Title 35 of the United States Code. Accordingly, this Court has exclusive subject matter jurisdiction over this action under 28 U.S.C. §§ 1331 and 1338(a).
- 5. Upon information and belief, this Court has personal jurisdiction over Defendants in this action because Defendants have committed acts within the Southern District of Florida giving rise to this action and has established sufficient minimum contacts with this forum such that the exercise of jurisdiction over Defendants would not offend traditional notions of fair play and substantial justice. Personal jurisdiction also exists specifically over Defendants because they, directly or through subsidiaries or intermediaries, make, use, offer for sale, sell, import, advertise, make available and/or market one or more products and/or services within the State of Florida that infringe the patent-in-suit, as described more particularly below.
- 6. Venue is proper in the Southern District of Florida pursuant to 28 U.S.C. \$1391(b) and (c) and \$1400(b).

BACKGROUND

7. Atlas is the owner by assignment of U.S. Patent Nos. 5,371,734 ("the '734 patent") entitled, *Medium Access Control Protocol for Wireless Network*, the application for which was filed in January 1993. (Exhibit A)

8. The invention of the '734 patent is directed, *inter alia*, to "a reliable medium access control (MAC) protocol for wireless, preferably radio frequency (RF), LAN-type network communications among a plurality of resources . . ." '734 patent, col. 5, lines 10-14.

9. Representative claim 1 of the '734 patent reads:

A communicator for wirelessly transmitting frames to and receiving frames from at least one additional communicator in accordance with a predetermined medium access control protocol, the communicators which transmit and receive the frames constituting a Group, each communicator including a transmitter and a receiver for transmitting and receiving the frames respectively, the medium access control protocol controlling each communicator of the Group to effect predetermined functions comprising:

designating one of the communicators of the Group as a hub and the remaining the communicators of the Group as remotes;

the hub establishing repeating communication cycles, each communication cycle having intervals during which the hub and the remotes transmit and receive frames;

the hub transmitting cycle establishing information to the remotes to establish the communication cycle and a plurality of pre-determinable intervals during each communication cycle, the intervals being ones when the hub is allowed to transmit frames to the remotes, when the remotes are allowed to transmit frames to the hub, and when each remote is expected to receive a frame from the hub;

the hub transmitting a frame containing the cycle establishing information which establishes both an outbound portion of the communication cycle when the hub transmits frames to the remotes and an inbound portion of the communication cycle when the remotes transmit frames to the hub, the frame containing the cycle establishing information also establishing the predetermined intervals during the outbound and inbound portions of the communication cycle when each remote is allowed to transmit and receive;

the remotes powering off their transmitters during times other than those intervals when the remote is allowed to transmit frames to the hub, by using the cycle establishing information transmitted from the hub; and

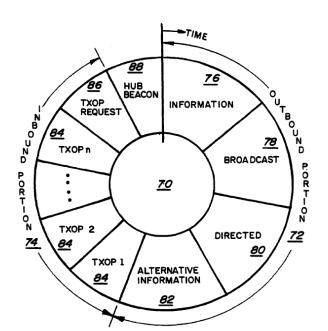
the remotes powering off their receivers during times other than those intervals when the remote is expected to receive a frame from the hub, by using the cycle establishing information transmitted from the hub.

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- 10. Defendants infringes the '734 through, for example, its use of smart meters and other smart grid technologies. The term "smart meter" generally includes a meter that measures and records electric, water or gas usage data and allows for communication between the meter, the utility company and sometimes even the customer.
- 11. Prior to January 2013, Defendants made and/or installed among their customer bases a network of smart meters including communication networks protocols. Such smart meters communicate to a base station over a Wide Area Network ("WAN") using Trilliant's communication module, Itron's ChoiceConnect and Itron's 100G Datalogger, CCU 100 (collectors) and Fixed Network Repeater, and/or Eka Systems EkaNet or now Cooper Power Systems RF AMI solution (hereinafter "Eka") using Centron meters and also GE KV2c meters.
- 12. The communication between the Trilliant smart meters and base station over the SecureMesh WAN occurs over the unlicensed 5.8 GHz MHz band and over a Neighborhood Area Network ("NAN") 2.4-2.48 GHz band. Eka's system operates over 902 MHz to 928 MHz Licensed Free Band. Itron's 100G can operate in the 900 MHz frequency range.
- 13. The smart meters and base station communicating over the WAN ("Accused Products") and are designed to form a communication group. Additional communications can occur via gateways, extenders, extender bridges, SecureMesh Connectors and home area network ("HAN"), repeaters and collectors.
- 14. The Accused Products each include a transceiver consisting of a transmitter and receiver that transmits and receives packets of data.
- 15. The Accused Products operate to transmit and receive information about customer utility usage.

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- 16. The Accused Products form a group of at least one device operating in remote mode (smart meter), and one device operating in base mode (base station). For example, NAN Modules can have at least six (6) other NAN modules connected to it.
- 17. The base station transmits at least one frame of data to smart meters that initiates a communication session, and which allows the smart meters to calculate the duration of the communication session and its constituent intervals before each smart meter transmits to the base station during the communication session.
- 18. During the communication session, the base station and each smart meter may transmit and receive packets of data to and from one another consisting of an interrogation message from the base station to the smart meter, and the meter will send utility usage and machine state data from the smart meter to the base station.
- 19. During the transmission period, each smart meter expects to receive a packet of data, which come in the form of a query from the access points (e.g. base station, gateway, extender or extender bridge, collector or repeaters).
- 20. During the reception period, the smart meter sends packets of data to the base station including utility usage and machine state data.
 - 21. The base station establishes communication cycles with the smart meters that



repeats (*e.g.*, hourly). During each such communication cycle, there are intervals during which the base station and the smart meters transmit and receive frames. For example, as depicted in Figure 3 of the '734 patent (above), the read request and meter status check request messages are frames. These frames contain information establishing the communication cycle, including the interval in which a read request or meter status check request message is sent from the access point to a smart meter (*i.e.*, the outbound portion of the communication cycle), and the interval in which a read message or meter status message is sent from the smart meter to the access point (*i.e.*, the inbound portion of the communication cycle).

- 22. Each smart meter determines whether to power off its receiver during times other than those when it is receiving data during a communication session. Likewise, each smart meter determines whether to power off its transmitter during times other than those when it is transmitting data during a communication session. For example, the smart meter can communicate with the access point using half-duplex radio frequency communications. In half-duplex communications, the smart meter powers down the receiver circuitry of the radio transceiver during the interval of the communication cycle in which it is transmitting the read and meter status check request messages. Once the smart meter has transmitted data packets to the access point, if its receiver has been powered down, it activates its receiver to await the reception of data from the base.
- 23. For additional explanation, a chart showing that the Accused Products literally satisfy each limitation of representative claim 1 of the '734 patent is attached as Exhibit B.

Count I – Infringement of the '734 Patent

24. Atlas hereby incorporates by reference paragraphs 1-23.

- 25. Defendant's smart meters and access points referred to herein directly infringed the claims of the '734 patent before the expiration thereof, including but not limited to, representative claim 1 above and claim numbers 2, 5, 13, 15, 16, 17, 22, 23, 24, 29, 30, 31, 32, 33, 34, 35, 44, and 46.
- 26. Defendant is liable for infringement of one or more claims of the '734 patent pursuant to 35 U.S.C. § 271, either literally or under the Doctrine of Equivalents.
- 27. As a result of Defendant's wrongful conduct, Atlas has been damaged in an amount to be determined at trial, but in no case less than a reasonable royalty.
- 28. Atlas has not made or sold, or had made or sold for it, any product covered by the claims of the '734. Of Atlas's predecessors in interest in the ownership of the '734 patent, only Digital Ocean Inc. made or sold, or had made or sold, products covered by the claims of the '734 patent. Digital Ocean marked all such products with the '734 patent number.

REQUEST FOR JURY TRIAL

29. Atlas requests a jury trial on all issues for which a jury trial is permissible.

PRAYER

WHEREFORE, Atlas respectfully requests that this Court enter the following prayer for relief:

- A. A judgment in favor of Plaintiff Atlas IP, that Defendant has infringed, either literally and/or under the doctrine of equivalents, the '734 patent;
- B. An award of damages resulting from Defendant's acts of infringement in accordance with 35 U.S.C. § 284;
- C. A judgment and order requiring Defendant to provide accountings and to pay supplemental damages to Atlas including, without limitation, prejudgment and post-

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judgment interest; and

D. Any and all other relief to which Atlas may show itself to be entitled.

Respectfully submitted,

s/ Michael C. Cesarano

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