BARTON KLINE, ISB # 1526
LISA D. NORDSTROM, ISB # 5733
Idaho Power Company
1221 West Idaho Street
P. O. Box 70
Boise, Idaho 83707
Telephone: (208) 388-2692
FAX Telephone: (208) 388-6936

Attorney for Idaho Power Company

RECEIVED
2006 OCT 27 PM 4:47
IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

CASSIA GULCH WIND PARK LLC AND CASSIA WIND FARM LLC Complainants v. IDAHO POWER COMPANY Respondent	)	Case No.: IPC-E-06-21 **Affidavit of DAVID "KIP" SIKES**

STATE OF IDAHO)
ss:
County of Ada)

David "Kip" Sikes, being first duly sworn upon an oath, deposes and says:

I am Delivery Planning Manager for Idaho Power Company and I hereby make this Affidavit in support of Idaho Power's Answer and Comments in response to the Complaint of Cassia Gulch Wind Park, LLC and Cassia Wind Farm, LLC (collectively "Cassia").

I. Description of the Transmission Interconnection Queue Process

Since early 2001 Idaho Power has received over 175 requests for generation interconnection to the Idaho Power electrical system. Some of these projects have been merchant requests to integrate projects to transmit power to markets, some for self-

generation or net metering, and a number of them have been Qualifying Facilities (QFs) indicating intent to sell their entire output to Idaho Power. These requests have come in all sizes, from 3 kW roof-top solar for net metering to plants over 1,500 MW.

The locations of these requests have been just as diverse. The map attached as Exhibit A to my Affidavit shows the general locations and cumulative MW capacity of these interconnection requests. While not all projects are ultimately constructed, the interconnection process administered by Idaho Power must assume each request is real and will proceed to construction and operation. The Interconnection Queue is dynamic, in that customers opt to proceed or withdraw their request as milestones are reached in the process.

Idaho Power's Delivery Business Unit function is responsible for interconnection of all generators to the Company's electrical system. This is completely independent of any power purchase or sales agreements between the developers and subscribers of such projects. The primary intent of Idaho Power's Delivery Business Unit is to safely and reliably interconnect and integrate the generation projects at the lowest possible cost while using our best efforts to meet the Applicants' schedules.

As part of this customer-driven process, Idaho Power conducts technical studies in three phases:

1. Feasibility Study – determines through limited system modeling and analysis if there are conditions which prevent the full output of the project from being injected into the system under requirements comparable to a Network Resource.

2. System Impact Study – further identifies and examines limitations and necessary construction to mitigate the system deficiencies preventing the project output from being fully utilized as a Network Resource.
3. Facility Study – engineering design of the system construction and improvements consisting of Interconnection Facilities, Special Facilities, and Network Upgrades.

Under Idaho Power's Commission approved Schedule 72 INTERCONNECTIONS TO NON-UTILITY GENERATION and the Federal Energy Regulatory Commission's ("FERC") generation interconnection processes, the construction and modification of facilities identified as part of these studies are the result of non-discriminatory technical analysis to ensure safe and reliable system operation. As part of that analysis, Idaho Power is required to review not only the specific equipment at the point of interconnection, but also to review the cumulative impact on the adjacent area and other customers.

II. Cassia Contributes to the Need for System Upgrades

Cassia Gulch Wind Park LLC and Cassia Wind Farm LLC, are among the generation projects within the area of system impact. While the incremental impact of either of these projects may appear diminutive, multiple projects injecting power into the same part of the electrical system have a significant cumulative impact.

Earlier this year Idaho Power reviewed the known system limitations and created a system impact report entitled "Generator Interconnection System Impact Study Report for Up to 305 MW of New Generation On the 138 kV Transmission System In the Twin Falls Area." This report is dated June 8, 2006 and was prepared in response to multiple

requests in the area to identify the backbone transmission system improvements required to provide Network Resource Interconnection Service.

The Network System Impact Study results identified four phases of transmission improvements required to accommodate various levels of new Network Resource Interconnection Service in the Twin Falls area. The report was performed on a comparable basis without regard to project intent or determination of QF or FERC jurisdictional status. It is important to note, as required in evaluation of Network Resources, these study results and identified transmission system improvements are indifferent to project type, disposition of energy, or other contractual issues.

These four phases of transmission improvements and the report were discussed with Commission Staff, Cassia and other developers in the queue at a meeting held at Idaho Power on August 15, 2006. Specifically, Idaho Power's Delivery Business United detailed the capacity added to the system by each phase of construction requirements and the associated costs. These improvements are required to ensure the safe operation of the system and comply with the reliability criteria of Idaho Power, the Western Electricity Coordinating Council (WECC) and the North American Electric Reliability Council (NERC) reliability criteria -- irrespective of which projects consume the transmission capacity, or in what order they are interconnected to the system.

III. Cassia's Claim That Idaho Power Engineering and Planning Assumptions are too Conservative is Incorrect.

In the transmission network, the designation of a Network Resource indicates the ability of the specified project to inject the full plant output into the electrical system and meet all reliability and operating criteria. As part of the technical studies, one of the

reliability criteria tests evaluates the loss of a single element (N minus 1 contingency, or N-1). In this study, the required capacity improvements were based upon the occurrence of a remaining system element becoming overloaded for one or more single contingencies.

In their Memorandum, Cassia asserts that Idaho Power is overly conservative in determining the acceptable overload prior to requiring Network Upgrades. Idaho Power's Reliability Criteria for System Planning states:

> Short-term emergency ratings are typically 110% of nameplate during the summer and 120% of nameplate during the winter. The short-term ratings infer that equipment loading can be reduced to the normal thermal rating within an hour. For near term planning, actual equipment ratings may be determined by performing detailed studies on the equipment and the involved system.

The System Impact Study Report conforms to these criteria. Specifically the report states that the Midpoint Series Capacitor Banks are capable of 110% overload on a continuous basis, which is consistent with the statement regarding actual equipment ratings for specific equipment.

In Footnote 2 of its Complaint and Memorandum, Cassia takes issue with Idaho Power's use of a 100% loading limit applied to a transmission line instead of 110% as suggested by a short-term emergency rating. However, in this instance the generation additions creating the emergency overload are non-dispatchable thereby preventing Idaho Power from reducing the overload to normal thermal rating within an hour. Therefore Idaho Power used the normal thermal rating as the limiting condition. This decision was not unduly conservative in light of the resources to be connected and was

required to ensure safe and reliable operation of the system and compliance with reliability criteria.

Cassia also claims the use of Special Protection Schemes or Remedial Action Schemes should be allowed in lieu of construction of transmission upgrades. Further Cassia implies that Idaho Power Delivery is operating in a discriminatory fashion in that the transmission upgrades would not be constructed if Idaho Power were the entity developing the wind generation in the Twin Falls area. This is simply not the case.

Remedial actions are automatic control systems initiated following a transmission disturbance. The utilization of remedial action schemes (RAS) or special protection systems is allowed to prevent system breakup or voltage collapse. RAS is not utilized to mitigate minor transmission line or equipment overloads as described by Cassia. Almost exclusively, RAS is deployed to prevent system instability and cascading outages. The WECC's Remedial Action Scheme Design Guide referred to by Cassia is merely a design guide – the WECC Operating Procedures delineate the remedial action schemes contained within the WECC and demonstrate common and accepted utility practice with such schemes. The majority of actual systems in service in the WECC address significantly more serious conditions than line overloads. Although it is not a long-term solution, Idaho Power is willing to deploy RAS at the generator's expense as a bridge or temporary solution while the transmission upgrades are being constructed as required to fully integrate the generation project(s). This accommodation would allow the generator to begin operation and meet their desired in-service date, should the remaining system improvements require additional construction time due to long-lead equipment or siting and permitting delays.

Due to the nature of the electrical network, all facilities required to interconnect generation project(s) and meet the safety and reliability criteria become an integral part of the system. While Interconnection Facilities are typically referred to as those required to "hook up" the generator to the system, once the electrical output becomes co-mingled and flowing on multi-use facilities, the Network Upgrades or transmission system improvements identified in the interconnection study processes are an essential requirement as part of the project interconnection for reliable operation of the system. Interconnection facilities, special facilities and network upgrades are collectively required to be comparable to Network Resource integration to ensure that all electric output can flow through the system at any given time.

IV. Idaho Power Would Not Construct the System Improvements in the Twin Falls Area Except for the Requirement to Integrate the Proposed Generation Projects

These required transmission improvements are the direct result of integration of the proposed generation, and would not be required otherwise. Idaho Power has numerous places on its system where significant investment in transmission facilities will be needed to serve a growing customer base, and would choose to fund those improvements instead if given the choice. It is true that additional resources and transmission improvements will be required on Idaho Power's system. However, Idaho Power plans and constructs this infrastructure according to actual need. If the resources were interconnected to the electrical system at a different location, the total interconnection and integration costs would likely be different – in some locations the costs would be higher and in other locations there may not be any transmission costs.

The total costs, including required transmission improvements, provide the appropriate price signal for efficient and economical siting of new resources.

For this reason alone, it is important to consider the total costs of locating projects and to recognize cost responsibility created by those choices. Given the number and size of projects seeking interconnection in the Twin Falls area, Idaho Power proposed a cost-sharing mechanism which equitably spread costs of the required transmission improvements based upon queue position and project capacity.

V. Idaho Power's Investment in Borah-West is Consistent with its 2004 IRP

The lead time required to construct transmission projects is significant. Complex transmission projects such as the Borah West upgrade can easily require seven years or more to complete. Construction lead times necessitated proceeding with the Borah West upgrade project prior to selection of the specific resource projects identified in Idaho Power's 2004 IRP. As noted in Mr. Schellberg's comments cited in Cassia's Memorandum, the Borah West project should be implemented in 2007, which is later than initially requested. These types of time delays further support the decision to proceed at that time.

Idaho Power's 2004 Integrated Resource Plan called for completion of the Borah West transmission upgrade in 2006. Specifically on page 80 of the 2004 IRP, the resource acquisition process included the request of Idaho Power Delivery to increase transmission capacity on the Borah West path to integrate resource additions identified in the 2004 IRP or to allow additional imports from the east side.

The action plan in the 2004 IRP identified resource additions to be acquired through a formal Request For Proposal (RFP) process. This RFP process differs from QFs, in that bids are solicited and evaluated according to specific criteria, including total costs. Costs of required transmission upgrades are included as part of the bid evaluation process in resource selection, as was contemplated in the 2004 IRP determining the preferred resource portfolio. Thus the costs of transmission upgrades are assigned directly to the generation projects through the RFP process, contrary to Cassia's inference otherwise.

FURTHER YOUR AFFIANT SAYETH NAUGHT.

David "Kip" Sikes

SUBSCRIBED and SWORN to before me this 27th day of October, 2006.

SANDRA D. HOLMES NOTARY PUBLIC STATE OF IDAHO

NOTARY PUBLIC FOR IDAHO
Residing in Boise, Idaho
My Commission Expires: 6-5-2009

CERTIFICATE OF MAILING

I HEREBY CERTIFY that on the 27th day of October 2006, I served a true and correct copy of the within and foregoing document upon the following named parties by the method indicated below, and addressed to the following:

Scott Woodbury Idaho Public Utilities Commission 472 W. Washington Street P.O. Box 83720 Boise, Idaho 83702	X ___ ___ ___ X	Hand Delivered U.S. Mail Overnight Mail FAX Email: scott.woodbury@puc.idaho.gov
Dean J. Miller McDevitt & Miller, LLP 420 W. Bannock Boise, Idaho 83702	X ___ ___ ___ X	Hand Delivered U.S. Mail Overnight Mail FAX Email: dean@mcdevitt-miller.com
Ronald K. Arrington Associate Chief Counsel John Deere Credit 6400 NW 86th Street Johnson, IA 50131	___ x ___ ___ X	Hand Delivered U.S. Mail Overnight Mail FAX Email: arringtonronaldk@johndeere.com
Peter J. Richardson Richardson & O'Leary 515 N. 27th Street P.O. Box 7218 Boise, Idaho 83702	___ x ___ ___ X	Hand Delivered U.S. Mail Overnight Mail FAX Email: peter@richardsonandoleary.com
Lawrence R. Lieb Exergy Development Group of Idaho, LLC 910 W. Main Street, Suite 310 Boise, Idaho 83702	___ x ___ ___ X	Hand Delivered U.S. Mail Overnight Mail FAX Email: lrllal@sbcglobal.net
David J. Meyer Vice President, Chief Counsel for Regulatory and Government Affairs Avista Corporation P.O. Box 3727 1411 E. Mission Ave. Spokane, WA 9220	___ x ___ ___ X	Hand Delivered U.S. Mail Overnight Mail FAX Email: dmeyer@avistacorp.com

Brian Dickman Dean Brockbank Pacificorp 201 S. Main, Suite 2300 Salt Lake City, UT 84111	____ Hand Delivered _x_ U.S. Mail ____ Overnight Mail ____ FAX _X_ Email: brian.dickman@pacificorp.com dean.brockbank@pacificorp.com
Jeff Schlect Manager, Transmission Services Avista Corporation P.O. OBx 3727 1411 E. Mission Ave., MSC-13 Spokane, WA 99220	____ Hand Delivered _x_ U.S. Mail ____ Overnight Mail ____ FAX ____ Email:

BARTON L. KLINE

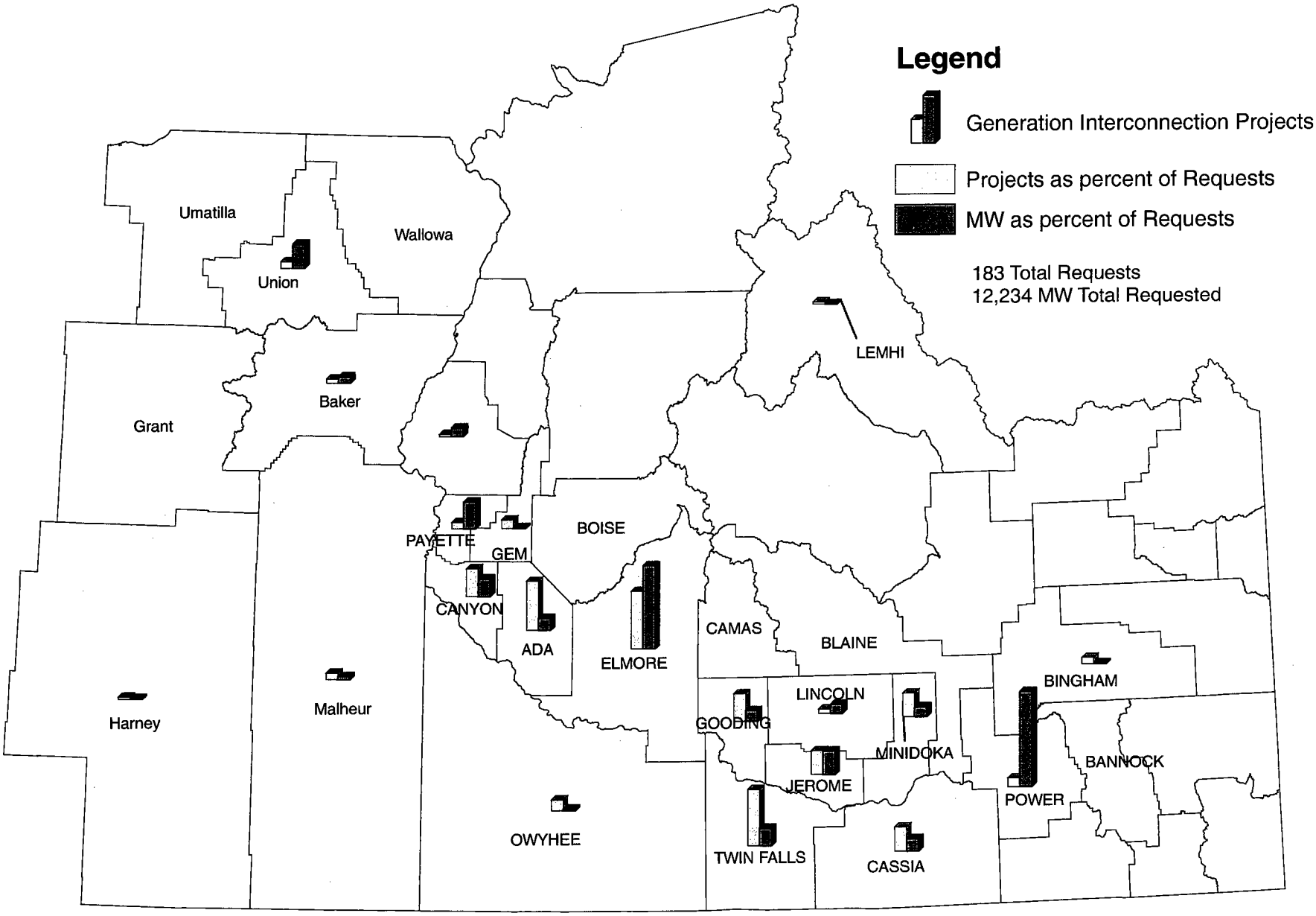
IDAHO POWER COMPANY

CASE NO. IPC-E-06-21

AFFIDAVIT OF DAVID SIKES

EXHIBIT A

Geographic Distribution of Idaho Power Generation Interconnnection Requests as of October 2006



Sikes Affidavit - Exhibit A
IPC-E-06-21