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Case No.: ER-2012-0174  
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**MISSOURI PUBLIC SERVICE COMMISSION**

**CASE NO.: ER-2012-0174**

**DIRECT TESTIMONY**

**OF**

**WILLIAM P. HERDEGEN, III**

**ON BEHALF OF**

**KANSAS CITY POWER & LIGHT COMPANY**

**Kansas City, Missouri  
February 2012**

KCP Exhibit No. 28  
Date 10-29-12 Reporter KF  
File No. ER-2012-0174

**DIRECT TESTIMONY**  
**OF**  
**WILLIAM P. HERDEGEN, III**

**Case No. ER-2012-0174**

1 **Q: Please state your name and business address.**

2 A: My name is William P. Herdegen, III. My business address is 1200 Main Street, Kansas  
3 City, Missouri, 64105.

4 **Q: By whom and in what capacity are you employed?**

5 A: I am employed by Kansas City Power & Light Company ("KCP&L") as Vice President,  
6 Transmission and Distribution Operations.

7 **Q: What are your responsibilities?**

8 A: My management responsibilities include the maintenance and operation of the  
9 transmission and distribution ("T&D") systems of KCP&L and KCP&L Greater Missouri  
10 Operations Company ("GMO") (collectively, the "Companies").

11 **Q: Please describe your education, experience, and employment history.**

12 A: I graduated from the University of Illinois, Champaign-Urbana in 1976 with a Bachelor  
13 of Science degree in Electrical Engineering. In 1981, I received my M.B.A. from the  
14 University of Chicago. I first was employed at KCP&L in 2001. I have over thirty-five  
15 years of experience in the electric utility industry. Prior to joining KCP&L, I served as  
16 chief operating officer for Laramore, Douglass and Popham, a consulting firm providing  
17 engineering services to the electric utility industry. Additionally, I was vice president of  
18 Utility Practice at System Development Integration, an IT consulting firm that focused on  
19 the development and implementation of technology systems. I began my utility career at

1 Commonwealth Edison and, over the course of more than twenty years, held various  
2 positions, including field engineer, district manager, business unit supply manager,  
3 operations manager, and vice president of Engineering, Construction & Maintenance.

4 **Q: Have you previously testified in a proceeding at the Missouri Public Service**  
5 **Commission (“Commission” or “MPSC”) or before any other utility regulatory**  
6 **agency?**

7 **A: Yes, I have previously testified before the MPSC and the Kansas Corporation**  
8 **Commission.**

9 **Distribution Field Intelligence and Technical Support**

10 **Q: What is the purpose of your testimony regarding a new technical work group?**

11 **A: The purpose of my testimony is to describe KCP&L’s investment in Distribution**  
12 **Automation and Smart Grid technologies and to request that the Commission include the**  
13 **cost of establishing, training, and sustaining a new technical work group that focuses on**  
14 **this Distribution Automation equipment in the field.**

15 KCP&L has been investing in Distribution Automation and Smart Grid  
16 technologies for more than a decade. We have been progressive in the application of new  
17 and smarter technologies to improve safety and reliability of service, while reducing  
18 overall costs to deliver service to our customers. We also have been very prudent in  
19 applying technologies to the distribution grid by using pilot programs and demonstrations  
20 prior to system wide deployments. We were one of the first in the nation to deploy  
21 Automated Meter Reading (“AMR”) technology in the mid-1990’s, among the first to  
22 leverage AMR communications for Capacitor Automation, the first to deploy 2-way  
23 cellular communications to our entire Underground Network in Kansas City, Missouri,

1 one of the most aggressive in deploying 2-way cellular communications to a wide array  
2 of distribution equipment, and are one of the few recipients for a U.S. Department of  
3 Energy Regional Smart Grid Demonstration Grant.

4 These upgrades have served our customers and KCP&L very well. In order to  
5 continue deployment and to maintain this specialized, high-tech equipment, a new work  
6 group that focuses on this Distribution Automation equipment in the field is necessary.  
7 We are requesting that the Commission include the cost of establishing, training, and  
8 sustaining this new technical field group in this rate case.

9 **Q: What is the name of this new technical field group?**

10 A: Distribution Field Intelligence and Tech Support ("DFITS").

11 **Q: Does the DFITS group exist today?**

12 A: No.

13 **Q: How will the DFITS group differ from KCP&L's existing workgroups?**

14 A: There are three key differences between DFITS and existing workgroups: (1) the DFITS  
15 group will focus on the distribution system; (2) the DFITS group will train specifically on  
16 equipment applied to the distribution system, freeing up our existing instrument/relay  
17 group to focus on Transmission and Substation ("T&S") controls and equipment and not  
18 to handle Distribution/Smart Grid controls in addition to T&S; and (3) the DFITS group  
19 will be significantly more technical than traditional distribution line workers and field  
20 operators. The typical line worker is more of an electrician and mechanic. The  
21 separation of existing workgroups and DFITS is similar to having substation mechanics  
22 and separate relay technicians.

1 **Q: How does KCP&L handle this high-tech Distribution Automation work today?**

2 A: Like many utilities, KCP&L has had protective equipment, electronic relays, supervisory  
3 control and data acquisition ("SCADA") communications and controls, and an Energy  
4 Management System in place in support of T&S equipment for a long time. The field  
5 work on these systems has been performed by technicians in our Instrument and Relay  
6 Group. As is the case with most utilities, this group's historical focus has been on T&S  
7 equipment. Smart Substation equipment typically is connected to the Energy  
8 Management System for control and monitoring by system operators. Substation  
9 equipment is typically hardwired to control panels and equipment in the substation  
10 control house. T&S Relay Technicians are specialized in installing, maintaining, and  
11 troubleshooting this equipment.

12 As intelligent electronic devices began to be deployed on the distribution system,  
13 it was fairly natural to stretch the Relay Technician role to include distribution  
14 equipment. It was initially a "side job" for the Relay Technicians, as the quantity and  
15 complexity of this work was minimal. However, since distribution equipment is installed  
16 on poles and in manholes, Relay Technicians typically need to coordinate with  
17 Distribution Operations and Construction personnel, particularly for pole-mounted  
18 equipment.

19 KCP&L's underground network automation is currently installed, maintained, and  
20 operated by our Underground Construction and Maintenance group.

21 **Q: Why does KCP&L need to change the current setup?**

22 A: As the number, variety, complexity, and interoperability of distribution devices has  
23 increased, and will continue to increase, a group is needed to focus specifically on

1 distribution in the field. We have engineers that focus specifically on Distribution  
2 Automation and who are separate from Substation and System Protection Engineers. Our  
3 experience shows that great benefit could be derived from a focused group in the field.

4 Like most utilities, KCP&L organizes many activities around T&S systems and  
5 the Distribution System separately. We have specialized groups for construction and  
6 maintenance and for operating equipment in these arenas. Introduction of automation to  
7 the distribution system has pulled our T&S Relay Technicians across those areas of  
8 specialization.

9 Although this was a logical way to start, it is not our industry's best practice.  
10 T&S systems and the Distribution system have unique characteristics that need to be fully  
11 understood by field technicians. The universe of automated field equipment is simply too  
12 large to expect a single technician to master both T&S and Distribution automated  
13 equipment going forward.

14 **Q: If distribution knowledge is key, why not utilize existing distribution line workers or**  
15 **distribution operations personnel?**

16 **A:** This was one alternative KCP&L considered and may be a best practice in 10 or 20 years.  
17 Due to their distribution system experience, we expect to draw candidates from these  
18 groups for the DFITS workgroup. While today's line worker understands how to build  
19 and operate the distribution system, he does not know how to program and troubleshoot  
20 electronic controls and communications equipment. Training this large workforce in this  
21 specialized area would be expensive compared to the cost of training a smaller,  
22 specialized group. Also, each individual in the large workforce likely will utilize the new  
23 skills infrequently, introducing greater opportunity for errors.

1 **Q: On what type of equipment does KCP&L anticipate the DFITS group will work?**

2 **A:** The types of distribution equipment controls, devices, and communications equipment on  
3 which KCP&L anticipates the DFITS group will work includes:

- 4       ▪ Capacitors;
- 5       ▪ Switching Equipment;
  - 6           ○ S&C SCADAmate®;
  - 7           ○ Reclosers;
  - 8           ○ S&C IntelliRupter Pulsecloser®;
  - 9           ○ Pad Mounted Automated Switchgear;
  - 10          ○ S&C Vista Gear®;
  - 11          ○ Solid Dielectric Underground Switches;
  - 12          ○ Other Motor Operated or Automated Switches;
- 13       ▪ Line Regulators;
- 14       ▪ Communicating or Automated Faulted Circuit Indicators;
- 15       ▪ Voltage and Line Current Monitors;
- 16       ▪ Intelligent Electronic Device (IED) Radios and Communications;
- 17       ▪ AMI or AMR Communications Equipment;
- 18       ▪ Meter Communications to other (non-AMI) Devices (Zigbee, etc);
- 19       ▪ Underground Network Automation; and
- 20       ▪ Other distribution equipment similar to the above listed items.

21 **Q: What is the scope of work that KCP&L anticipates for the DFITS group?**

22 **A:** The anticipated scope of work on which the DFITS group will focus includes:

- 23       ▪ Commission Distribution Controls and Distribution Automation equipment listed
- 24       in the previous answer;
- 25       ▪ Install and verify settings in Distribution Controls – both in the office and in the
- 26       field – under close direction of appropriate engineering groups;
- 27       ▪ In-field troubleshooting of Distribution Controls and Communications issues;
- 28       ▪ Minor/simple in-field repairs or control exchanges;
- 29       ▪ Coordinate field meets with other groups to ensure appropriate resources are
- 30       planned and available for productive in-field work;
- 31       ▪ Respond to non-emergency alarms from Distribution Controls. (First responders
- 32       for lights-out or other emergency situation remains with Distribution System
- 33       Operations.) May be called upon to assist Operations in emergency situations;
- 34       ▪ Perform Alarm-Driven Distribution Control Maintenance – directed and
- 35       prioritized by supervision;
- 36       ▪ Perform Routine or Time-Based Maintenance on Distribution Controls:
  - 37           ○ Battery replacements;
  - 38           ○ Radio Upgrades;
  - 39           ○ Hardware Upgrades; and

- 1           ○ In-field Firmware or Software Upgrades (that can NOT be performed
- 2                         remotely).
- 3           ▪ Complete and/or update appropriate Distribution Control paperwork or electronic
- 4                         forms or electronic databases/systems as directed;
- 5           ▪ De-Commission Distribution Controls and equipment;
- 6           ▪ Participate in system restoration events (SERP, Storms, emergency situations,
- 7                         apparent equipment malfunctions); and
- 8           ▪ Follow all appropriate safety and lock-out, tag-out procedures and policies.

9   **Q: Will the DFITS group need special equipment and vehicles?**

10 A: Yes. The DFITS group will require a variety of sophisticated test equipment and tools  
11 necessary to support the scope of work and distribution control equipment. Appropriate  
12 vehicles, including vans, 4x4 pickup trucks, and one light duty bucket truck, will be  
13 required to support the identified workforce and scope of work.

14 **Q: Will the DFITS group require any support personnel or supervision?**

15 A: Yes. We anticipate needing a Supervisor for the group and an Analyst.

16 **Q: What functions will be performed by the DFITS Analyst position?**

17 A: One of the benefits of Distribution Automation (“DA”) is the ability of equipment to  
18 provide status and condition data to the Companies’ personnel and systems. Much of this  
19 data can be used for condition-based maintenance, reducing costs associated with simple  
20 time-based maintenance. Condition information can be used to assess equipment health  
21 and refine maintenance programs. The Companies can plan maintenance work when  
22 equipment needs maintenance, rather than inspecting equipment that needs no  
23 maintenance.

24           The Companies’ real time operations systems focus attention on outages and other  
25 critical conditions that pose imminent risks. Our Distribution System Operations  
26 (“DSO”) personnel monitor and manage equipment for these critical or imminent  
27 conditions. Other equipment status and condition information is important to timing and



1 scheduling condition-based maintenance activities to keep equipment operating at  
2 optimal performance, and to prevent future critical conditions or equipment failure.

3 As the Companies continue adding DA equipment, the amount of equipment  
4 condition and status information is growing exponentially. Current work management  
5 systems cannot interpret and process DA data automatically and generate work directly to  
6 field technicians. An analyst thus is required to perform the following functions:

- 7 • Monitor equipment condition and status, apply appropriate decision processes,  
8 prioritize and prepare work for issuance to field DFITS technicians;
- 9 • Escalate conditions that merit immediate attention to the DSO and supervision;
- 10 • Track completion status of condition-based maintenance;
- 11 • Prepare a variety of reports related to DA equipment condition and maintenance;
- 12 • Track "aging" of condition-based maintenance and escalate tasks that have exceeded  
13 acceptable time limits;
- 14 • Act as a liaison between internal work groups that interface regularly with DFITS;
- 15 • Perform routine work order creation and closing when necessary;
- 16 • Perform remote actions on DA equipment to clear conditions or improve equipment  
17 operation;
- 18 • Provide in-the-office support to DFITS field technicians, particularly to enhance field  
19 technician on-site productivity;
- 20 • Provide DA support to the DSO during major outages or storms; and
- 21 • Support the DFITS Field Supervisor as necessary.

22 **Q: What is the anticipated startup cost for implementing DFITS?**

23 A: Startup costs derive mainly from vehicles, field tools, and field test equipment. Nine (9)  
24 vehicles are required initially. A training and technology demonstration lab is required to  
25 provide specialized training facilities for initial and ongoing technical training. The lab  
26 will also will be used to demonstrate new or proposed equipment and technologies.

27 **Q: Are any of these startup costs already in rates?**

28 A: No. These specific startup costs are incremental.

1 **Q: What is the anticipated incremental annual cost for DFITS?**

2 A: To support current distribution equipment and projections through 2017, the following  
3 resources are required:

- 4       ▪ 8 field technicians;
- 5       ▪ 1 field supervisor;
- 6       ▪ 1 analyst;
- 7       ▪ 9 field vehicles (other fleet pool vehicles may be needed from time to time);
- 8       ▪ Testing equipment;
- 9       ▪ PPE and safety equipment;
- 10      ▪ 9 "one-mobile" laptops;
- 11      ▪ Cell Phones;
- 12      ▪ Initial training and annual refresher training; and
- 13      ▪ Training Supplies and other misc costs.

14 Attached hereto as Schedule WPH-1 is a list of the anticipated costs of this program,  
15 which includes both annual operations and maintenance ("O&M") costs and capital costs.  
16 The annual O&M costs are included in Schedule JPW-4 attached to the Direct Testimony  
17 of Company witness John P. Weisensee (adjustment CS-49). The capital costs are  
18 included in Plant in Service on Schedule JPW-2, also attached to Mr. Weisensee's Direct  
19 Testimony.

20 **Q: Is KCP&L seeking recovery of the DFITS costs in this case?**

21 A: Yes.

#### Inventory Management

23 **Q: What is the purpose of your testimony regarding inventory management?**

24 A: Currently, KCP&L and GMO inventories require physical separation consistent with the  
25 Commission's Report and Order at pp. 264-65 (July 1, 2008) in Case No. EM-2007-0374  
26 (the "Acquisition Docket"), relating to the Affiliate Transaction Rule, 4 CSR 240-20.015.  
27 We are asking for the Commission's approval to combine management of inventory of  
28 stock materials and tools to improve operational efficiencies.

1 **Q: What are the issues concerning how KCP&L and GMO handle their respective**  
2 **inventories?**

3 A: From the time of the Commission's approval of the Aquila acquisition, KCP&L's  
4 employees provide operational services to GMO service territories pursuant to the  
5 October 10, 2008 Operational Agreement in the Acquisition Docket, Item 502. When  
6 KCP&L employees perform work relating to GMO territory assets, they are required to  
7 pull material stock from segregated GMO inventory. The separation of warehoused stock  
8 is illustrated in Schedule WPH-2 (photographs of KCP&L's Northland Service Center).

9 There would be a gain in efficiencies by removing operational barriers for use of  
10 stock materials and tools between the Companies and decreasing redundant inventory  
11 imposed by such barriers.

12 **Q: The separation of materials in a warehouse does not seem to be onerous. How does**  
13 **this affect the capture of efficiencies?**

14 A: I would agree, if the matter were only to separate material in a warehouse. The  
15 separation of inventory is operationally inefficient, requiring additional handling of  
16 materials and additional paperwork. Stores, linemen, and other field service personnel  
17 must always be aware of the inventory source for all items requisitioned for a specific  
18 job—even down to the nuts and bolts. If a GMO job requires a specific part that is not  
19 available in its inventory, the job is delayed until the GMO stock is replenished even if  
20 the part is available across the aisle in KCP&L's inventory.

1 **Q: Why can't employees doing GMO work just "borrow" the part from KCP&L's**  
2 **inventory until the part can be replenished in GMO's stock?**

3 **A:** Operationally, borrowing inventory from each company's inventory is not possible. To  
4 ensure accounting compliance, the accounting software prevents transaction entries  
5 across company lines in the course of day-to-day operations. Another option is recording  
6 the transaction by creating a manual journal entry; however, the entry of the transaction  
7 into the accounting software for inventory material items is barred. Also, the transfer of  
8 inventory between the Companies may create a sales tax liability.

9 In extraordinary circumstances, like a storm event, inventory will be purchased  
10 across the inventory barrier to shorten an outage period, but the transaction is complex.

11 **Q: How does the inability to record inventory transfers affect KCP&L and GMO on a**  
12 **larger scale?**

13 **A:** In the broader view, at the service center level, operational inefficiencies and increased  
14 inventory redundancy exist. KCP&L uses a central stores model, distributing materials,  
15 equipment, and tools from a central warehouse at the Front & Manchester ("F&M")  
16 Service Center. The model optimizes inventory levels, maximizes savings through  
17 quantity buying, and ensures that materials, equipment, and tools meet safety and design  
18 specifications. The centralized material handling and inventory control model allows  
19 KCP&L to purchase in large quantities and then distribute only what is required to each  
20 KCP&L service center.

21 GMO does not operate under a central stores and inventory control model.  
22 Purchase orders are written specifically for the unique service center. The effect is a

1 separate purchase order for each service center for every order of materials, equipment,  
2 and supplies.

3 **Q: Can GMO adopt a central stores and inventory control model?**

4 A: That is an option, but synergistic savings are lost with this option. GMO facilities are not  
5 large enough to meet the demands of a central warehouse and, if there were a suitable  
6 facility, it would require additional personnel to operate the facility—basically  
7 duplicating operations at KCP&L's Warehouse, at the F&M Service Center.

8 The F&M Service Center can already meet additional space and operational  
9 demands created by supplying GMO and KCP&L materials, equipment, and tools. Also,  
10 without an inventory barrier, items are easily disbursed throughout the system, shortening  
11 response time in the event of an outage and decreasing inventory redundancy.

12 **Q: How do KCP&L and GMO's different inventory models affect efficiency?**

13 A: KCP&L and GMO cannot share inventory between each company's service centers  
14 without creating a sales tax liability. In the event of a severe storm or other catastrophic  
15 event, the Companies will "sell" inventory to ensure outages are restored in the shortest  
16 period of time. Depending on where the assets are sold these transactions may create a  
17 sales tax liability. This transaction is analogous to KCP&L and The Empire District  
18 Electric Company transferring inventory to one another during a major outage.

19 The inability of KCP&L's and GMO's service centers to share inventory also  
20 highlights the inefficiencies of two inventories.

21 **Q: Are you able to illustrate this inefficiency in KCP&L's and GMO's operations?**

22 A: Yes. For example, if KCP&L's Brunswick Service Center needs a tool to complete a job  
23 and GMO's Henrietta Service Center has the tool, the tool can not be exchanged.

1           Instead, a request must be made to KCP&L's Warehouse at the F&M Service Center.  
2           The Brunswick and Henrietta Service Centers are less than one hour from each other.  
3           The Brunswick and F&M Service Centers are over two hours from each other. Clearly,  
4           there is advantage to exchanging inventory between KCP&L and GMO service centers.  
5           Another example is that when a service truck from Henrietta has equipment assigned to  
6           the truck, such as line fuses, post insulators, or guy anchors, there will be two such items  
7           on the truck: one for KCP&L and one for GMO. Since these items are doubled to  
8           support the separation of inventory, the variety of service material on the truck is limited  
9           and results in return trips to the appropriate service center for the KCP&L or GMO  
10          material to address a service call. With respect to field operations, the separate  
11          inventories not only affect service efficiencies, but also affect the customer.

12           The inventory exchange barriers between service centers are represented in  
13          Schedule WPH-3. As previously discussed, such barriers are exemplified by the  
14          restrictions on sharing each company's inventory within the same service center such as  
15          the Northland Service Center.

16           Furthermore, the operational inefficiencies of stocking and selecting process for  
17          the same material from two separate inventories causes a high level of frustration among  
18          service center and operational personnel. Frankly, the inventory exchange barriers are  
19          difficult to explain to those that stock and use materials and tools everyday. It is not  
20          uncommon for such people to voice their discontent with the practice and question the  
21          policy to KCP&L managers, supervisors, and executives.

1 **Q: Does GMO's inventory management model affect inventory levels?**

2 A: Yes. GMO's model creates redundant inventory. Without a central material source,  
3 GMO service centers independently order materials, equipment, and supplies. To ensure  
4 items meet safety and design specifications, GMO's service centers are required to order  
5 from approved sellers. However, the sellers often have minimum quantities greater than  
6 quantities needed by the GMO service centers.

7 For example, if GMO's Henrietta Service Center needs five cross arms to  
8 complete a job, the supplier only sells cross arms in quantities of twenty-five. The net  
9 result is that service center has twenty additional cross arms in inventory. Although  
10 transfer of inventory between GMO service centers is allowed, there is operational  
11 complexity and inefficiency in completing such transfers.

12 **Q: Please elaborate on what you mean by the operational complexity and inefficiency in  
13 completing intra-GMO service center transfers under the GMO inventory model.**

14 A: The complexity and inefficiency stem from unscheduled transportation of materials and  
15 tools between GMO service centers, store personnel coordinating with the eleven other  
16 service centers to determine availability of the needed material or tool, and intra-GMO  
17 service center transfers generating additional paperwork.

18 **Q: Are inventory levels at service centers available in the materials systems?**

19 A: Inventory levels at each GMO service center are available in the materials systems, but  
20 the systems do not allow the requestor to know if the material or tool is already tagged  
21 for planned jobs scheduled at the other service centers. This is analogous to seeing an  
22 advertisement in the newspaper for televisions at a good price, but when you go to the  
23 store, stock is depleted. Calling the store would have saved a trip to the store.

1 **Q: How does KCP&L's inventory management model affect inventory levels?**

2 A: The KCP&L model better controls excess inventory as it enables KCP&L to purchase the  
3 minimum quantities required by the supplier and then distribute only what is required to  
4 the requesting service center.

5 **Q: The Companies are separate business entities and require independent accounting**  
6 **for work and materials completed under their unique tariffs using a single inventory**  
7 **model, how will the Companies account for time and materials used in their**  
8 **independent service territories?**

9 A: Work is coded at the job level to ensure allocation to the correct regulated business.

10 **Q: In addition to maximizing savings by standardizing parts, suppliers, and contracts,**  
11 **what additional savings will the Companies realize by having a single inventory of**  
12 **materials used by each company?**

13 A: Additional savings are realized by reducing the redundant level of inventory and easing  
14 the process of sharing items between KCP&L and GMO service centers. Also, without  
15 the current inventory barrier, efficiencies are gained in the physical processing and  
16 management of the stock.

17 **Q: What impact will a single inventory model have on the Companies' operation?**

18 A: In addition to the improvements in efficiency and reduction in redundancies described  
19 above, the Companies expect to see gains in productivity, such as not having to wait  
20 around for the necessary material or tool, once a single inventory model is implemented.  
21 While difficult to quantify, the Companies also expect to see a reduction in worker  
22 frustration from seeing an item on GMO's inventory shelf they need for a KCP&L job or  
23 vice-versa.



1 **Q: Is there potential for KCP&L and GMO to realize additional savings because of the**  
2 **acquisition?**

3 A: Yes. The ability to avoid inventory redundancies allows savings that result from having  
4 lower inventory levels.

5 **Q: What option do you propose to address the Companies' inventories?**

6 A: I propose that Great Plains Energy Services ("GPES") purchase KCP&L's and GMO's  
7 current inventories ("start-up inventory") and then, on a going-forward basis, purchase all  
8 future Material and Supply inventory for use by KCP&L and GMO. This option has the  
9 advantage of low operational complexity and material savings.

10 The current practice of separate inventories has few, if any, opportunities to  
11 capture synergistic savings. The proposed policy, whereby GPES purchases the Material  
12 and Supply inventory and then transfers it to GMO and KCP&L as required, is a long-  
13 term view that simplifies warehouse operations, improves operational efficiencies in the  
14 field and allows better management of inventory levels.

15 **Q: Why would you use GPES instead of KCP&L or GMO?**

16 A: Missouri sales tax statutes require an entity to keep inventory that is to be resold  
17 physically segregated from inventory that will be used in operations of the same entity.  
18 Therefore, if the inventory was combined at KCP&L or GMO, we would have to  
19 physically segregate inventory that would be used by its own operations from the  
20 inventory that it would sell to the other entity. Obviously, this would not help reduce the  
21 operational inefficiencies created by maintaining separate inventories for KCP&L and  
22 GMO now. But, if we purchase the inventory at GPES and resell it to KCP&L and GMO  
23 when needed, all of the inventory would be resell inventory and we would not have to

1 physically segregate any of the inventory at GPES. Therefore, using GPES would allow  
2 us to maximize the benefits of combining inventory of KCP&L and GMO.

3 **Q: Does that conclude your testimony?**

4 **A: Yes, it does.**

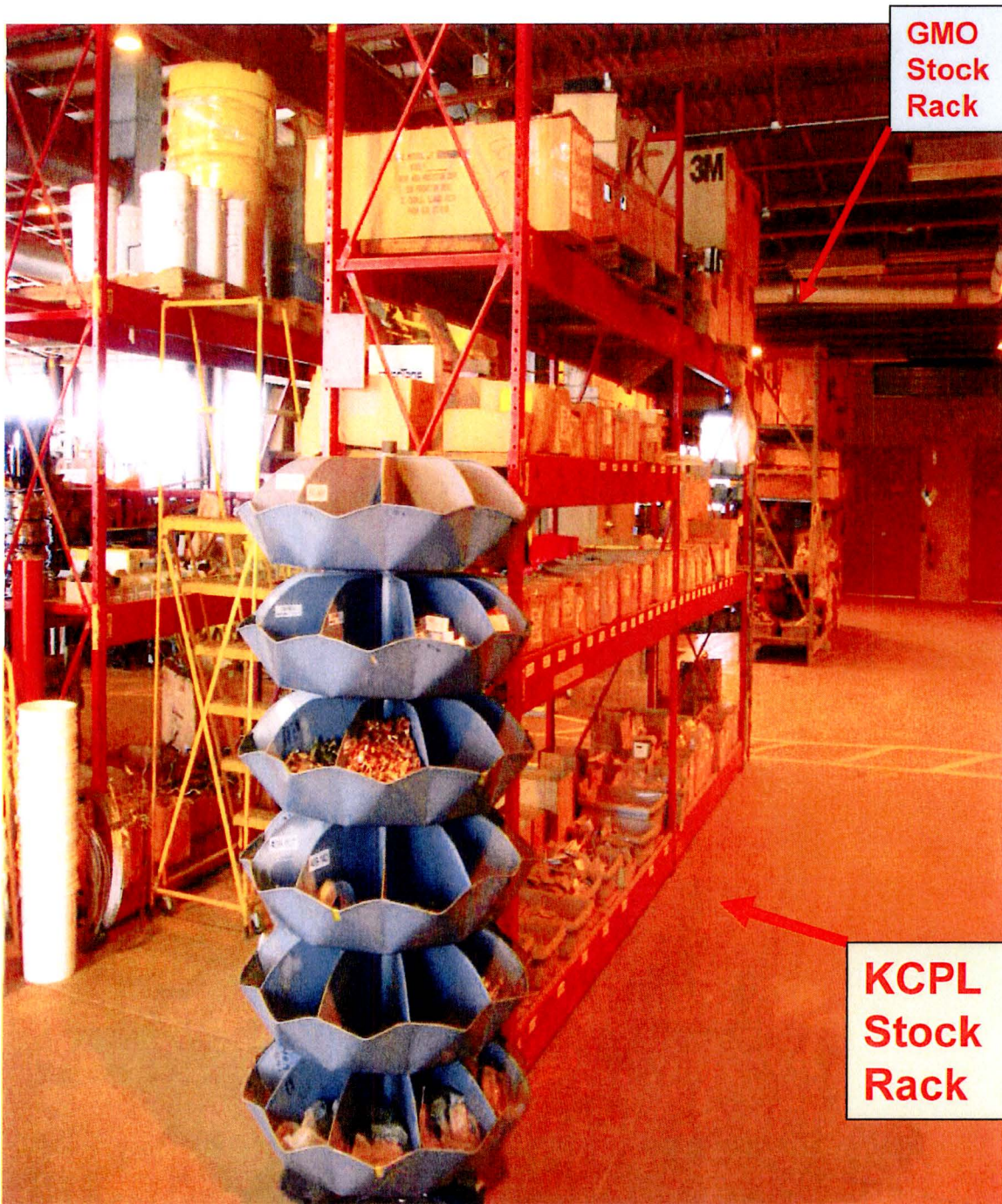


KCP&L and KCP&L GMO  
2012 RATE CASE - Direct Filing

Distribution Field Intelligence and Technical Support (DFITS) Summary

Line No.	Description	No.	\$ Amount	Purpose
1	<b>Expense:</b>			
2	Field Technicians & Supervisor (9 X \$45 X 2080hrs)	9	\$ 842,400	Standard labor costs for Technicians, includes \$104,300 for initial training labor.
3	Field Technical Analyst (\$45 X 2080hrs.)	1	93,600	
4	Benefits at .61		571,100	
5	Labor & Benefits		\$ 1,507,100	Standard Benefit Loading.
6				Total labor & Benefits
7	<b>Operations Support:</b>			
8	On-going Training	9	45,000	Initial training for new technician, and continuing training.
9	Training Support		35,000	Trainer support.
10				
11	<b>Vehicles</b>			
12	1 Light Duty Bucket Truck	1	28,750	Fuel & Annual Operating Costs
13	1 Cargo Van	1	8,200	Fuel & Annual Operating Costs
14	1/2 Ton 4WD Pickups	7	61,400	Fuel & Annual Operating Costs
15				
16	Other Equipment, Supplies & Lab Support		140,000	Safety, protection, testing equipment, software and cell phones.
17	<b>Total Expense</b>		\$ 1,825,450	
18	<b>Capital:</b>			
19	<b>Equipment Support:</b>			
20	Lab -Simulation & Training Lab		\$ 375,000	Training Lab for mock-up and in-field simulations.
21	<b>Vehicles</b>			
22	1 Light Duty Bucket Truck	1	110,000	Light Duty Bucket Truck
23	1 Cargo Van	1	30,000	Cargo Van
24	1/2 Ton 4WD Pickups	7	210,000	7 -4WD Pickups
25	Testing Equipment		120,000	Technical testing equipment and laptops greater than \$1000.
26				
27	<b>Total Equipment Support</b>		\$ 845,000	
28				
29	<b>Total Distribution Field Intelligence Technical Program</b>		\$ 2,670,450	

Northland Service Center  
Free Stock Area



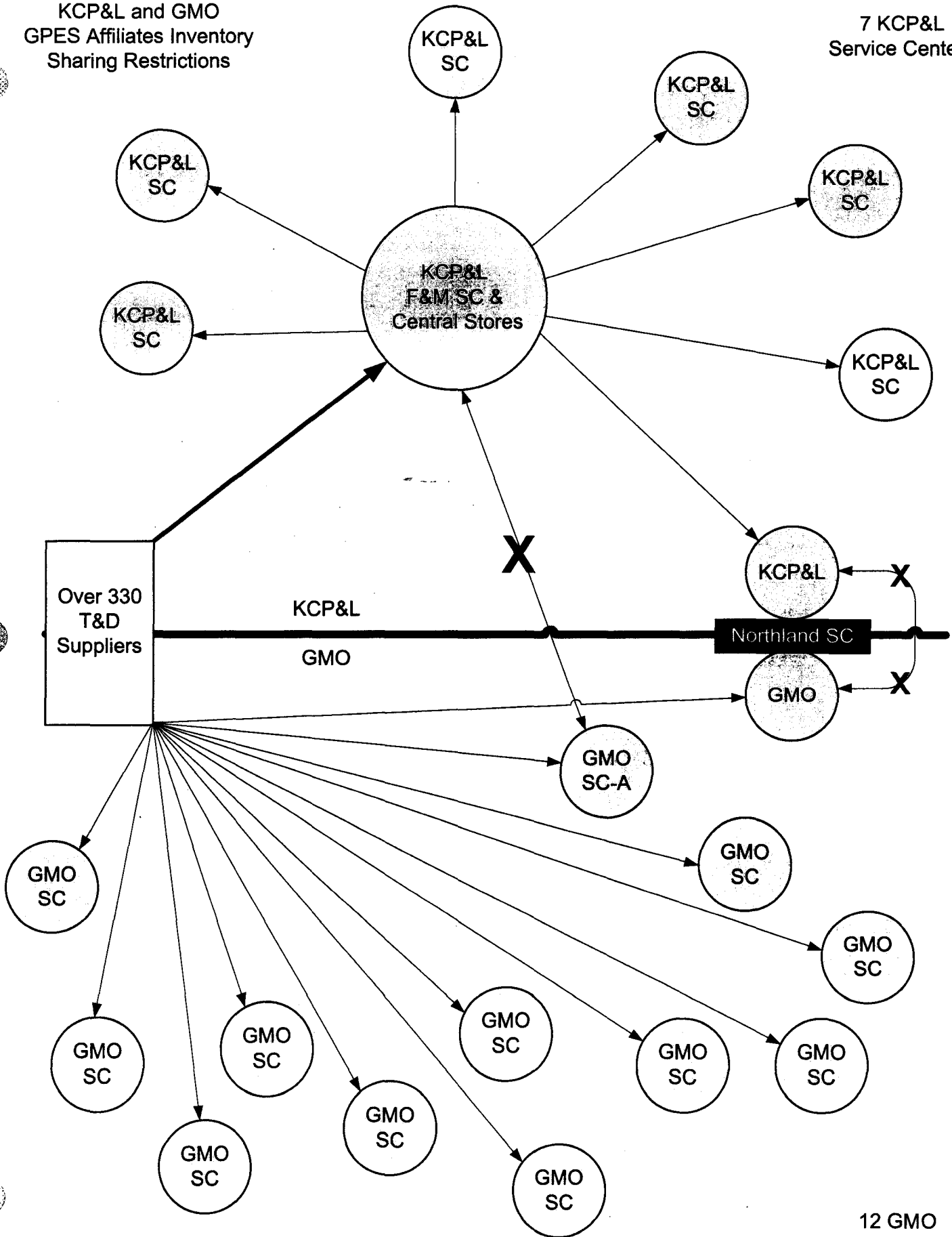


Northland Service Center  
Storeroom Area



KCP&L and GMO  
GPES Affiliates Inventory  
Sharing Restrictions

7 KCP&L  
Service Centers



12 GMO  
Service Centers  
Schedule WPH-3