only 0.80. In other words, it cost more money than planned. These indices can be further reduced into percentages: in the hypothetical above, the contractor who has an SPI of 0.80 is 20 percent behind schedule for the period measured, and if its CPI was 0.80, it had a 20 percent loss of efficiency/productivity. With these indices, an SPI of 1.0 or greater means that the contractor has maintained or bettered its planned pace, and for CPI an index of 1.0 or better means that the contractor is working productively.

(Roberts Direct Testimony at pp. 11-12.)

Q:

Q:

A.

Earned value allows us to understand a contractor's schedule progress quickly and easily. Having an index like SPI that aggregates all of the data collected in the Level 3 Project Schedule allows us to take a quick pulse of progress and make judgments on whether some aspect is falling behind schedule. We also could make the same judgments regarding productivity from the contractors' CPI. These indices allow you to drill down further because they provide immediate visibility to schedule and performance issues. When we meet with contractors' representatives to talk about their progress, often the first thing discussed is their SPI and CPI. We also use earned value for external reporting to the EOC and in our various reports because these indices give someone not involved in the day-to-day details of the Project an understanding of the Project's progress.

When did you start using earned value on the Iatan Unit 2 Project?

A: Once the Baseline Schedule was established, we began generating earned value reports.

We have used earned value ever since. I have attached as an example the package of weekly project metrics that was distributed at one of our status meetings on September 23, 2009 (Schedule BCD2010-15). This package includes charts that were created by the KCP&L project controls team and by Schiff Hardin's Jim Wilson. Some of these charts were hand-outs and others were posted on the wall of the conference room where we met on site.

Who attended these weekly meetings where such metrics were discussed?

A:

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A:

Mr. Downey attended each one, unless he had a serious conflict, and was usually on-site though occasionally would participate by telephone. Other regular participants during the course of the Iatan Project included at various times Mr. Giles, Mr. Blanc, Mr. Riggins, Mr. Reynolds, Mr. Bassham, Mr. Heidtbrink, Mr. John Marshall, Ms. Lora Cheatum, Ms. Lori Wright and Mr. Michael Cline from the corporate office. Mr. Churchman, myself, Mr. Bell, Mr. Foster, Mr. Archibald, Ms. Denise Schumacker, Mr. Jones and Ms. Burgess were regular attendees from the Iatan Project site. Schiff's attendees included Mr. Roberts, Ms. Okizaki, Mr. Gould, Mr. Wilson and Mr. Meyer when he was on-site. Depending on the issues at hand, others were invited to attend as needed.

Q: Could you describe the content of Schedule BCD2010-15?

Yes. The first page is a summary of the weekly earned value update by area and by contractor. From this sheet, you could identify each major contractor's overall schedule and productivity and their most recent week's progress. The next several pages are individual metric packages that our Project Controls team published weekly for ALSTOM and Kiewit. These packages have the same information as the first page,

though that data has been broken out for easier review. The charts with multi-colored vertical bars were prepared by Mr. Wilson and represented Schiff Hardin's independent view of the major contractors' earned value status and other issues that were identified on those charts. Following that are four pages of charts prepared by Mr. Wilson regarding tracking of Kiewit's quantities of work installed for major components and systems. Mr. Wilson used this data as a cross-check against Kiewit's earned value status to ensure that Kiewit was properly reporting its status. Also in this package are a series of charts on the Project's CTO status, which as of this particular meeting was a major topic of conversation. The last chart depicts some of the metrics the KCP&L start-up team updated to show its progress with training.

11 Q: How long were these weekly meetings?

- 12 A: They would typically last about 1 hour though often they would extend into smaller
 13 group meetings if there were issues that required added focus.
- 14 Q: Were these meetings effective?

- A: Absolutely, yes. As one can see from the metrics package, there was often a very granular discussion regarding the Project's status. During the meetings, there would be a very open dialogue and the members of the senior management team would ask probing questions regarding the Iatan Project's status. Schiff Hardin's team would also present its issues and engage in the conversation. These meetings were key accountability tools for our site project team.
- Q: Do you believe that the Level 3 Project Schedule has been an effective tool at measuring progress?
- 23 A: Yes, I think the schedule has been instrumental in how we have managed the work.

1	Q:	You also discussed the Project's documentation as a tool that you have used for
2		managing the work. In general, what types of documents does the project team
3		regularly maintain that show the Project's schedule progress and any issues that
4		may arise?
5	A:	The project team maintains hundreds of documents per week. We typically summarize
6		the most important of those documents into reports like our Monthly Report that are
7		shared with KCP&L's management, and that same information is also summarized for
8		the Quarterly Reports that are provided to Staff and other parties to the S&A. In a
9		summary manner, we report our schedule progress, project risks and issues on a quarterly
10		basis to the Staff as part of our Quarterly Reports. Company witness Mr. Giles discusses
11		the Quarterly Reports at length in his testimony. Most importantly, we use the
12		documents we maintain as management tools.
13	Q:	Can you provide an example of the types of documents that the Iatan Unit 2 project
14		team uses as a management tool?
15	A:	Yes. We typically record the minutes of key meetings so that we can keep track of daily
16		issues, action items that individuals take on to find answers or resolve issues, and to
17		generally hold the Project's participants accountable for resolving any outstanding items.
18	Q:	Will meeting minutes reflect evidence of problems on the Project?
19	A:	Yes, though that is not the purpose of keeping them. Documents like meeting minutes,
20		Project correspondence, notices of potential delays and other documents ordinarily kept

on the Project are intended to highlight issues for management that need to be resolved.

Construction projects like Iatan Unit 2 have issues everyday, and proper documentation

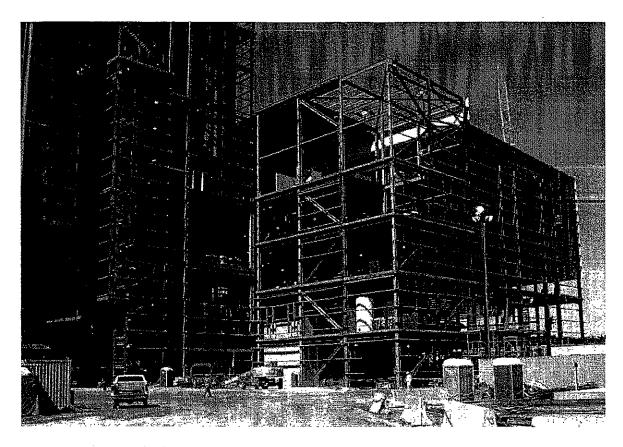
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1	of these	issues	allows	for	mitigating,	avoiding	or	resolving	issues	as	expeditiously	as
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- 2 possible.
- 3 Q: You also stated that another tool at the Project's disposal in 2006 to 2007 was the
- 4 Project's Control Budget Estimate or CBE. When was the CBE approved?
- 5 A: The Board of Directors approved the CBE on December 5, 2006.
- 6 Q. How did the project team utilize the CBE?
- 7 A. The CBE has been the base budget for the Project since that time. The CBE has been
- 8 used for cost tracking since that time. Company witness Mr. Archibald explains how the
- 9 Control Budget Estimate and the reports generated by the project team in our Cost
- Portfolio have been used for identifying and explaining cost variances on the Iatan
- 11 Project.
- 12 Q: In summary, you listed the Level 3 Project Schedule, the Cost Control System and
- the CBE as some of the tools that were implemented during the 2006 to 2007 period.
- 14 Has KCP&L continued to utilize these and other tools for managing the work since
- 15 2007?
- 16 A: Yes. The Level 3 Project Schedule certainly has been maintained since it was baselined
- on April 9, 2007 and is comprehensive with respect to all work that has occurred on the
- Project. The types of documentation and the form or format of that documentation may
- have changed, but we may have attempted to document any and all issues that have arisen
- so that there is visibility of those issues to the people who need to resolve them. Skire, as
- 21 mentioned, as well as the other procedures and controls put in place, have all been
- successful in managing the Project. Finally, per our commitments and as described by
- Company witness Mr. Archibald, the CBE continues to be used for tracking costs and

1		cost variances. Each of these tools has allowed KCP&L to transparently report the
2		Project's cost and schedule progress to Staff since the Project's inception.
3	Q:	How have these tools allowed KCP&L mitigate cost overruns on the Iatan Project?
4	A:	Company witness Mr. Downey testifies at length regarding how the two major settlement
5		agreements with ALSTOM on Iatan Unit 1 and Iatan Unit 2 were significant for the Iatan
6		Project. Those agreements are the essence of mitigation of risk, for all of the reasons Mr.
7		Downey describes.
8	Q:	Mr. Downey also describes the importance of coordination of the contractors as a
9		major driver of those agreements. Could you provide an example of why KCP&L
10		needed to maintain cooperation between the major contractors?
11	A:	Yes. The photograph below is dated November 19, 2008 and shows the south side of
12		Iatan Unit 2 under construction.

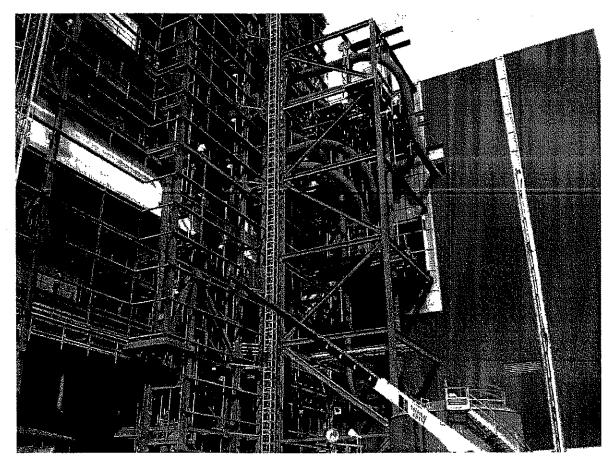


 As of this time, ALSTOM's work was concentrated in the boiler building on the left-hand side of the photo, and Kiewit's work was concentrated in the turbine building on the right side. There was very little interaction between ALSTOM and Kiewit at that time in this area. **

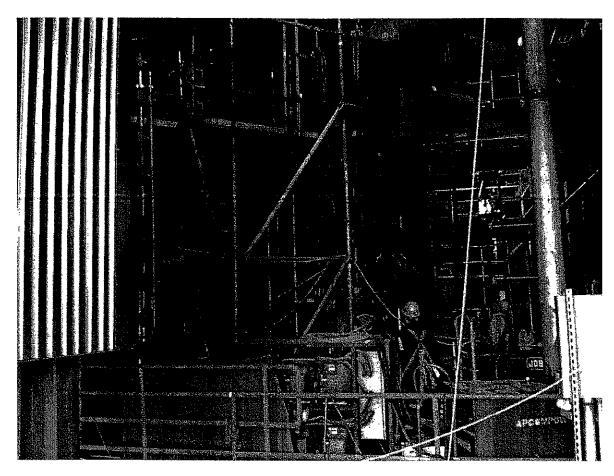
** As of that time,

the project team knew that it needed to develop construction turn-over ("CTO") dates in order to maintain coordination and proper hand-offs between ALSTOM and Kiewit.

The next photo was taken almost precisely one year later on November 3, 2009. This photo is a close-up of the corner where the boiler and turbine buildings meet. This picture depicts how ALSTOM and Kiewit were now required to coordinate their work.

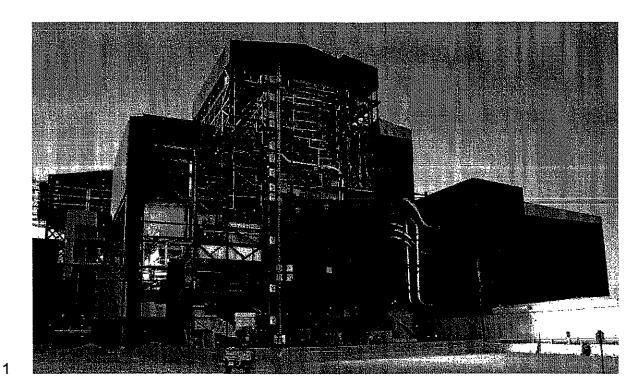


All of the large orange colored piping in this picture is large bore piping that Kiewit had to snake through the boiler building and terminate in the turbine building. Each of these large bore piping lines represented a CTO with hand-off's and tie-in points. These large pipes run the length of the boiler and are the main steam and hot and cold reheat lines that go from the boiler to the turbine. For Kiewit to install these pipes in ALSTOM's boiler, it had to coordinate space, scaffolding, equipment needs and work hours with ALSTOM. The picture below, which was also taken on November 3, 2009, depicts the tight quarters that ALSTOM and Kiewit had to share at this time.



The silver pipe on the far right side of the picture is large bore piping that Kiewit installed and insulated in virtually the same space as ALSTOM's workers were assembling one of the boiler's burners. Kiewit's piping assembly had to run both vertically and horizontally through sections of the ALSTOM boiler that looked much like this picture.

The final photograph in this series was taken on October 5, 2010. This photograph depicts the completed construction of this same area. The large bore pipes that were orange in November 2009 are now silver because they have been insulated and are supported in their final position.



This is just one example of how KCP&L had to actively manage the coordination of ALSTOM and Kiewit in order to complete the work on the Iatan Project. But for the agreements KCP&L concluded with ALSTOM and Kiewit that ensured their mutual cooperation, I do not believe that Iatan Unit 2 would have been in-service on August 26, 2010.

STAFF'S PROPOSED ADJUSTMENT FOR JLG INCIDENT AND CONSTRUCTION RESURFACING PROJECT

Q: Describe the "JLG Incident."

A:

JLG is a company that manufactures various types of equipment that includes mobile lift platforms. This type of equipment provides a lift range of anywhere from 10 to 150 feet to access and elevated work areas. On August 25, 2007, a JLG mobile man lift operated by ALSTOM personnel toppled over while the lift platform was in an extended position (referred to as the "JLG Incident"). ALSTOM submitted a claim for additional time and

an increase to its contract price for alleged impacts and delays arising from the JLG
 Incident.

3 Q: Describe the Construction Resurfacing Project.

20 ---

A:

A:

In support of its claim arising from the JLG Incident, ALSTOM asserted that the soil conditions were the cause of the incident. Regardless of the actual cause of the incident, the remaining construction work on the Iatan project required the use of a lot of heavy equipment. So the mere occurrence of the JLG incident on the Iatan Site created concern of the safe operation of similar equipment and the stability of the surface of the Site among the operators of large equipment. In support of its commitment to project safety, to improve the contractors' confidence regarding the safe operation of equipment on the Iatan site, and to minimize disruption to the construction, the Iatan project management team felt it was important to voluntarily and proactively commence a multi-phase construction resurfacing project to improve the quality and stability of the soil surface ("Construction Resurfacing Project"). ALSTOM submitted a claim for acceleration costs based on the alleged impacts and delays caused by KCP&L's execution of the Construction Resurfacing Project.

17 Q: What did KCP&L evaluate in assessing ALSTOM's claim arising from the JLG 18 Incident and Construction Resurfacing Project?

We evaluated both the merits of ALSTOM's individual claims and worked with KCP&L's senior leadership to develop a broader commercial strategy. We also reviewed the results of soil testing and KCP&L's Safety Department incident analysis which indicated that operator error or mechanical failure caused the incident and confirmed that the soil composition on site was within acceptable composition and tolerances. Based on

•	tins information,
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4	**
5	The documentation supporting ALSTOM's claim included a letter from one of its
6	subcontractors refusing to return to Site or operate equipment until KCP&L provided
7	evidence of acceptable soil conditions.
8	At the time that KCP&L and ALSTOM were exchanging letters and negotiating a
9	resolution of the JLG Incident and Construction Resurfacing Project, there were many
10	other outstanding commercial issues between KCP&L and ALSTOM. These issues
11	included, for example:
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3		KCP&L determined its path forward based on both the merits of ALSTOM's claim
4		arising from the JLG Incident and the Construction Resurfacing Project as well as the
5		broader context of a strategy to resolve all of the outstanding issues.
6	Q:	What did KCP&L management decide and what were the benefits of this action?
7	A:	**
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14		** To accomplish this, we engaged in a few mediated settlement meetings with
15		ALSTOM and made a few settlement offers for the JLG Incident and Construction
16		Resurfacing Project claim before reaching a Settlement Agreement with ALSTOM on
17		March 19, 2008 ("JLG Settlement Agreement"). **
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4	Q:	What is your response to Staff's position regarding the JLG Settlement Agreement?
5	A:	Staff believes that KCP&L was unreasonable for executing the JLG Settlement
6		Agreement. See Staff Report at pp. 46-47. As I explained above, this management
7		action was a crucial step to gain ALSTOM's commitment to resolve the outstanding
8		commercial issues in a single negotiation. Company witnesses Downey and Roberts
9		explain the benefits of the ALSTOM Settlement Agreement and that the alternative to
10		proactively settling these disputed issues could have detailed the project both from a
11		construction and commercial perspective.
12		STAFF PROPOSED ADJUSTMENT FOR CAMPUS RELOCATION
13	Q:	Describe the background of the Campus Relocation.
14	A:	The "Campus Relocation" was the move of construction trailers in response to a request
15		from Kiewit, the Balance of Plant Contractor, for additional laydown space close to the
16		turbine building to streamline its assembly and installation of the steam turbine generator.
17		Additionally, KCP&L discovered as contractors submitted their crane plans showing the
18		location of the cranes they would use to complete their work, that the contractors were
19		planning to put cranes and conduct material lifts very close to some of the construction
20		management trailers.
21	Q:	What factors did KCP&L consider when evaluating the proposed Campus

Relocation?

The project team weighed the pros and cons of keeping the trailers where they were and requiring Kiewit to use an alternate space farther away as well as the pros and cons of relocating the trailers. The factors included: risk of claims from contractors, best practices in handling/storing equipment, safety of construction management personnel, safe crane operation, the anticipated costs of both courses of action, and the needs of the project based on already known and future anticipated laydown plans and crane plans of other contractors.

Q: What did KCP&L's project management decide?

A:

A:

A: Based on an analysis of the relevant circumstances, we decided that it was in the best interest of the construction project to relocate the trailer campus. In the spring of 2008, KCP&L relocated the existing construction management trailers on the Iatan site from their original position approximately 100 feet to the east (referred to as the "Campus Relocation").

Q: Staff asserts that the Campus Relocation is a result of a design error. (See Staff's Report at p. 44, ln. 27.) Do you agree?

No. Laydown space is a dedicated space for storage of material and equipment to be used during construction. The general arrangement drawings for the Project identify general laydown space available to the contractors. The owner and engineer plan a certain amount of laydown space as a part of the initial site arrangement, but the original laydown plan is only as accurate as the level of the design. Additionally, the amount of laydown space available for a project depends on the site, operations activities, transportation routes in and out of the plant, access issues based on the work of other contractors, and other logistical concerns. Laydown plans are dependent upon special

equipment storage requirements, unique material, and delivery dates which are not known until after they have been procured. Accordingly, the amount of laydown space necessary and when it is needed evolves with the knowledge of those requirements as the design and procurement progress. On a project like Iatan, it is not uncommon for the use of laydown space to change several times over the life of the project as the equipment and material is designed, procured, fabricated, delivered, sequenced, and installed. At Iatan, the original laydown plan was created at approximately ten percent (10%) complete. When Kiewit came to the Iatan Project almost a full year later, its team brought new and additional information regarding the laydown plan, the sequence of delivery and installation of the turbine generator components and other ideas based on its experience. This was a normal consequence of design maturation.

Q:

A:

Would it be appropriate to assert a backcharge against anyone for the Campus Relocation costs?

No. Staff's assertion that KCP&L should recover the costs of the Campus Relocation as a backcharge is not appropriate. See Staff Report at pp. 43-44. A backcharge is a bill for costs incurred by one party that, in accordance with the contract, should have been performed by the billed party. As I previously stated, any projects' needs for laydown space can evolve significantly as the design progresses, equipment is specified, and delivery and installation dates become firm. Kiewit's proposal for additional laydown space near the turbine building was a proposal based on value engineering and efficient installation and was not an indication of inadequate design of the laydown space. As a result, it is not appropriate to backcharge anyone for these costs.

Q: Staff rejects the possibility that the Campus Relocation provided project savings or other benefits because was KCP&L could not produce documentation proving cost

savings or benefits. (See Staff's Report at pp. 43-44.) Is this appropriate?

Q:

O:

A:

A:

No. Staff may be dissatisfied with the amount of documentation of the benefits and cost savings associated with the Campus Relocation, but it does not mean that the decision was without savings. Kiewit suggested this additional laydown plan as a value engineering (i.e. cost savings) suggestion based on its vast experience in the industry. Kiewit would have only prepared documentation of the costs it actually incurred. Because KCP&L accepted its proposal, Kiewit would not have generated a cost comparison of the costs that would have been incurred if KCP&L had rejected its proposal. As a result, KCP&L does not have any cost comparison documents.

What is your opinion regarding the reasonableness of the Campus Relocation?

Based on my experience, the Campus Relocation was a sound business decision. KCP&L had the responsibility to coordinate many contractors on site. If KCP&L had rejected Kiewit's proposal, it would have made Kiewit's assembly and installation of the turbine more time consuming, risky, costly, and complicated, as well as increasing the risk of delays, damage, and other issues. It is reasonable to set the contractor's up for success and accommodate design maturation issues to facilitate the contractor's productivity.

STAFF PROPOSED ADJUSTMENT FOR LIQUIDATED DAMAGES

Staff cites an audit report addressing Burns & McDonnell's performance to support its argument that Burns & McDonnell is responsible for "most if not all" of the delays resolved by the ALSTOM Unit 1 Settlement Agreement. (Staff's Report pp.

A:

A:

**

No, I do not agree. As with virtually any project, engineering was on the critical path for the early years of the Iatan Project, and the Project documentation was focused on the risks that were apparent at that time. One of the key early Milestones on the Iatan Project was the turnover of boiler foundations. As a result, a lot of the Iatan Project's documentation and meeting minutes pointed out the risks right up to the time the foundation was turned over *on time* to ALSTOM. Timely completion of the design work to support early equipment procurements was the other significant risk to the scheduled completion date. Therefore, in my mind it was appropriate that the project documentation, audit reports, and quarterly reports would have contained significant discussion of potential risks, delays, and other concerns regarding the status of engineering.

14 Q: Was KCP&L owed liquidated damages by ALSTOM on Unit 1?

No. The facts do not support Staff's argument that KCP&L should have offset the amount of the Unit 1 Settlement Agreement with liquidated damages. See Staff Report pp. 55-56. As Company witness Kenneth Roberts testifies, KCP&L would have had to demonstrate damage by ALSTOM's failure to meet the Milestone, however, there were other events unrelated to ALSTOM's construction performance that delayed the start-up of Unit 1. The Iatan Unit 1 Project schedule included an outage to take Unit 1 off-line and tie-in the new AQCS equipment (the "Unit 1 Outage"). During that outage, the construction team discovered a latent defect in the economizer casing. This defect and the necessary repairs impacted the duration of the Unit 1 Outage by thirty-two (32) days.

See Churchman Rebuttal Testimony, Docket Number 0089, at p. 6; Davis Rebuttal
Testimony, 0089 Docket, at pp. 7-8; 4Q 2008 Strategic Infrastructure Investment Status
Report. The risks associated with the Unit 1 Outage were communicated to the Staff in
the Quarterly Meetings and in Quarterly Reports which explain KCP&L's outage
planning. See 4Q 2008 Strategic Infrastructure Investment Status Report.

Additionally, during the Unit 1 start-up after the Unit 1 Outage, a vibration event with the turbine caused an additional delay to start-up of the Unit. See Davis Rebuttal Testimony, 0089 Docket, at pp. 9-10.

** The effect of the economizer incident and the turbine made it impossible for ALSTOM to achieve the remaining Milestone Dates. As a result, ALSTOM would be entitled to an adjustment of the Milestone Dates and KCP&L would not be able to impose liquidated damages from the original Guaranteed Unit 1 Provisional Acceptance Milestone Date. Contrary to Staff's assertion and putting aside the terms of the ALSTOM Unit 1 Settlement Agreement that Company witness Mr. Downey discusses at length, KCP&L did not have a credible claim to collect **

** in liquidated damages associated with ALSTOM's Unit 1 work.

STAFF PROPOSED ADJUSTMENT REGARDING AFUDC DUE TO TURBINE

19 <u>INCIDENT</u>

Q:

Staff proposes that the increase in AFUDC accrued during the delay to Unit 1 Start-Up resulting from the turbine incident should be removed from the rate case. (See Staff's Report at p. 93, lines. 21-30) What is your response to this proposal? I disagree with Staff's proposed exclusion of these AFUDC costs. The basis for Staff's position is that the turbine work performed during the Unit 1 Outage was not an Iatan Project cost. Staff is wrong because this work was relevant to the Iatan Unit 1 Project. The turbine work was required to support the Unit 1 retrofit project and included installing a new rotor, repacking the low pressure section to increase the unit output and reworking the turbine spindle in order to support the performance of the new AQCS equipment. KCP&L discussed the turbine incident in its Quarterly Reports to Staff as a part of the discussion of the Iatan Project. See KCP&L Strategic Infrastructure Initiatives — Quarterly Status Updates, 1Q 2009 Report at pp. 6-7, 23-25. Regardless of the accounting of these costs, the turbine work was relevant to the Iatan Unit 1 Project.

STAFF'S PROPOSED ADJUSTMENT TO SCHIFF HARDIN'S FEES

- 12 Q: Are you aware of the proposed disallowance from Staff regarding Schiff Hardin's fees and rates?
- 14 A: Yes.

A:

A:

- 15 Q: Do you agree with Staff regarding its recommended disallowance of a large portion of Schiff Hardin's fees?
 - Not in the least. Schiff Hardin has been an asset to the Iatan Project and the Company should be applauded for obtaining expert assistance in a number of areas that KCP&L recognized it did not have in-house expertise. Our senior management recognized areas it needed to strengthen and brought in a team of industry-knowledgeable professionals and advisors to help us get the Project out of the gates, and they did help us do that. Company witnesses Curtis Blanc and William Downey further respond to these proposed disallowances.

Q: How much have you worked with Schiff Hardin's team on-site on the Iatan Project?

2 A: I have worked with Schiff on a daily basis since I joined the Iatan Project in May 2006.

Virtually the first thing that I worked on after joining the Iatan Project was the

negotiation of the ALSTOM contract, which was ongoing at that time, and Schiff

Hardin's team played a major role in negotiating that contract.

Q: With who from Schiff Hardin have you worked?

A:

When I first joined the Project, I quickly got to know Schiff Hardin's commercial team, in particular Virgil Montgomery and Carrie Okizaki, who were actively engaged in the ALSTOM negotiations. Soon thereafter, I met Ken Roberts and Eric Gould from Schiff Hardin and Jim Wilson, Dan Meyer and Tom Maiman, who are consultants that work with Schiff Hardin. Mssrs. Gould, Wilson and Meyer contributed their expertise in Project Controls to both the negotiations with ALSTOM and the ongoing development of the Iatan Project's cost estimate and schedule. Mr. Maiman brought his perspective from his years of experience in the industry to help with the schedule and some of the engineering challenges. Mr. Roberts provided, and continues to provide, advice to KCP&L's senior management regarding the events in the field, large commercial issues and project risks and is the overall manager/coordinator of Schiff Hardin's team.

Over time, some of the individuals from the Schiff Hardin team have changed. Once the ALSTOM contract was completed, Mr. Montgomery spent much less time with KCP&L and Ms. Okizaki took the lead on the commercial issues on site, including the negotiation and administration of the Iatan Project's contracts. Mr. Maiman chose to retire and other individuals were later added to the Schiff Hardin team, including Joe Byce, who has been integral in assisting our team during the Project's Cost Reforecasts,

and Ms. Amanda Schermer, who works with Ms. Okizaki on legal, commercial and procurement issues. Schiff Hardin also brought in other technical, legal and paralegal help as their workflow varied and the issues that the Iatan Project was facing at the time.

Schiff Hardin also recommended Packer Engineering to us the day of the Crane Incident. Packer's team was on-site by that evening, along with Schiff Hardin attorney Kevin Kolton, documenting the accident site and cataloguing the evidence. Packer continue to help us assess a number of other difficult structural issues upon request, including the Iatan Unit 1 economizer casing brittle failure, reviewing of crane lift plans, analysis of the failed steam blow piping, and perhaps most notably assisting KCP&L with the investigation of the T-23 material in the Iatan Unit 2 boiler. These were all significant risks that required individuals with very specialized knowledge and experience. Because of Schiff Hardin's prior work with Packer and its team's knowledge of the industry, Schiff Hardin could attract such an eminent team as Packer's at a moment's notice.

- Q: Of the individuals you just named from Schiff Hardin, who are the lawyers and who are the non-lawyer professionals?
- 17 A: Mr. Roberts, Mr. Kolton, Mr. Montgomery, Ms. Okizaki and Ms. Schermer are all lawyers; Mssrs. Gould, Wilson, Meyer, Maiman and Byce are non-lawyers.
- 19 Q: Can you describe how the Schiff Hardin team's work on site is divided?
- A: Ms. Okizaki and Ms. Schermer are engaged day-to-day with our procurement and inhouse legal team in assisting with legal and commercial issues that come up with our contractors. They also participate in reporting to our senior management team on those issues in various forums that have been used for communication, including the weekly

meeting I described earlier with senior management. Ms. Okizaki and Ms. Schermer are responsible for contract negotiations, contract interpretation questions, review of commercial correspondence from a legal perspective and insuring that commercial processes and procedures are being followed. Ms. Okizaki has a tremendous appreciation for the balancing act that owners have to do with contractors to enforce the contracts while maintaining positive working relationships with the contractors' project teams. Ms. Okizaki and Ms. Schermer have been tremendous assets to the Project.

Mr. Wilson is a project scheduler with decades of experience. Mr. Wilson's first project out of college was the original construction of Iatan Unit 1 in the 1970's. Mr. Wilson has helped our project controls team on a day-to-day basis. Mr. Wilson also produces his own analysis of the schedule and metrics that he presents to our project management team and our senior management team. Mr. Wilson has provided his expertise in scheduling and construction management and was instrumental in developing the project's Level 1 and Level 3 schedules and the Project's strategic plan, and later the plan to mitigate the impacts from the crane accident, among other key events on site.

Mr. Meyer and Mr. Byce focus on the Iatan Project's cost and budget. Mr. Meyer is able to apply his experience as a dispute review board ("DRB") panelist and his long history in the industry to provide us with a basis for how we compare with the rest of the industry. Mr. Meyer and Mr. Byce have been instrumental in assisting our team in the cost reforecasts and vetting of the information regarding cost issues.

Mr. Gould coordinates the work of the Schiff Hardin project controls team and the other technical experts on site, and works on both schedule and budget issues, as well as with Ms. Okizaki on reviewing contractor claims and progress related to defending

KCP&L in commercial claims. Mr. Gould has also helped in the creation of the original strategic schedule, Control Budget Estimate and risk matrix. He helped the project team develop the multiple risk analyses that the project team has created, provides support in developing the Quarterly Reports and has been key link between the technical and commercial sides of the Iatan Project.

A:

Q:

A:

Q:

Schiff Hardin's team works well together and I believe they each benefit from the other's experience.

Have you ever seen Ms. Okizaki or Ms. Schermer engage in the Project Controls work that Schiff Hardin performs on the Iatan Project?

No. Ms. Okizaki and Ms. Schermer use the project controls team from Schiff as a resource and vice-versa. While Schiff Hardin's team works very closely together, there is a clear division of the work, though I do believe that Ms. Okizaki and Ms. Schermer have very advanced knowledge of project controls and construction issues that they are able to utilize in the commercial and legal realms.

Staff estimates that Schiff Hardin has spent approximately 80% of its time on project controls and 20% on legal procurement. See Staff's Report at p. 82. Do you agree with that assessment?

18 A: No, and I don't understand why Staff has a need to estimate something that could be easily verified on invoices, assuming you are looking at them.

20 Q: Do you know why KCP&L's Internal Audit has not audited Schiff Hardin?

My understanding is that Internal Audit decided its resources were better utilized evaluating risks to the construction itself, construction cost control issues, and management efficacy in adherence to project and corporate procedures rather than focus

1	on our oversight team.	Considering that	Schiff Hardin's	total billings	for the	Iatan
2	Project are less than 1% of	of the total cost, tha	t seems like a ver	y good decisio	n.	

Q: Has Schiff Hardin been useful to the project team during the Project?

Q:

A:

A:

Absolutely, yes. Their team has significant and very specific experience on large utility projects and has lent that experience to our team in many ways. Mr. Roberts has been very effective in working with our Senior Management to help them understand the risks of this very complex project. The team that Schiff has deployed in the field has provided us with everything from our day-to-day commercial issues and schedule tracking to helping in a crisis, as they did after the Crane Incident, to helping us model risks from start-up and T-23 material.

STAFF PROPOSED ADJUSTMENT OF CUSHMAN COSTS

Do you agree with Staff's adjustment of the Project Costs by decreasing the rate Cushman charged for consulting work on the Project?

No. Cushman was hired to develop processes and procedures for the Iatan Project including the Project Execution Plan ("PEP"). Mr. Cushman is highly respected in the industry and had a proven track record with KCP&L from Hawthorn. The basis for Staff's adjustment is a comparison of Cushman to the staff augmentation services provided by LogOn. This is inappropriate. KCP&L evaluated the costs for Cushman's specialized services and determined that the costs were reasonable.

STAFF PROPOSED ADJUSTMENT FOR WSI COSTS

Q: Please explain Welding Services, Inc.'s involvement in the Iatan Project as a subcontractor to ALSTOM.

1	A:	The boiler construction requires a significant amount of pressure part welding.
2		**
3		ALSTOM's plan for pressure part installation was dependent upon timely arrival of
4		pressure part assemblies from its overseas fabricators in the Czech Republic and
5		Indonesia, as well as domestic suppliers of critical pipe. The project team has reported in
6		its Quarterly Reports that ALSTOM had received pressure parts **
7		** KCPL Strategic Infrastructure Intiatives – Quarterly
8		Status Update: 2Q 2008 Report at p. 10; 3Q 2008 Report at pp. 8, 11, 31, 35; 4Q 2008
9		Report at p. 31. When ALSTOM's structural steel erection of the boiler was completed
10		in May 2008, ALSTOM was approximately ** behind schedule on the Unit 2
11		boiler. When the work shifted to pressure parts, ALSTOM immediately fell farther
12		behind. **
13		**

Based on this information, KCP&L engaged in discussions with ALSTOM regarding a schedule recovery plan as a part of its ongoing active management and weekly meetings to discuss opportunities for improvement of the schedule. KCP&L was familiar with the high quality of Welding Services Inc. ("WSI") based on previous work. Accordingly, WSI's involvement in the Iatan Unit 2 Project as a subcontractor to ALSTOM arose as a part of its recovery plan to overcome delays in installing the boiler pressure parts.

Q: What did KCP&L take into consideration when it negotiated with ALSTOM regarding hiring WSI?

1	A:	**
2		
3		** the fact that ALSTOM has to pursue a
4		Recovery Plan has impact not only its work but also on Kiewit and the timely completion
5		of the other Balance of Plant work. Accordingly, KCP&L evaluated the potential options
6		to align Kiewit and ALSTOM's progress to the same schedule. Additionally, KCP&L
7		was interested in obtaining high quality welds on the boiler performed as quickly and
8		accurately as possible.
9	Q:	Was WSI's welding performance significantly better than ALSTOM's?
10	A:	Yes. WSI is a specialty contractor that focuses on specialty repair and overhaul
11		construction projects. WSI utilizes highly trained craft who are fast, efficient, and
12		reliable. **
13		
14		** See Schedule BCD2010-11. **
15		
16		
17		**
18	Q:	What is your response to Staff's proposed disallowance of these costs?
19	A:	I believe these costs were reasonable given the circumstances. I believe that had
20		ALSTOM not employed WSI that the Iatan Unit 2 Project could have been significantly
21		delayed and the overall costs of the Project would have far exceeded the premium cost
22		for WSI.
23		STAFF PROPOSED ADJUSTMENT OF THE AUXILIARY BOILER

1	Q:	What is your understanding of Staff's disallowance for the permanent auxiliary
2		boilers as discussed on pages 98-99 of Staff's Report?
3	A:	Staff proposes to transfer \$633,493 from the Iatan 1 AQCS costs to the Iatan Common
4		Plant costs related to the addition of three permanent auxiliary electric boilers. Staff
5		asserts that these boilers will serve both Units 1 and 2 and therefore should be charged to
6		the Iatan Common Plant. Staff states that the total cost of the permanent auxiliary boilers
7		is \$7,577,732 but are outside the scope of its Report.
8	Q:	What is your understanding of Staff's disallowance for the temporary auxiliary
9		boiler discussed on pages 101-02 of Staff's Report?
10	A:	Staff proposes a disallowance of \$7.75 million related to the use of a temporary auxiliary
11		boiler during the start-up of Iatan Unit 2. Staff relies on testimony of Mr. Nielsen filed in
12		Kansas Docket Number 10-KCPE-415-RTS that the costs were imprudently incurred and
13		proposes to true-up this cost in its January 2011 true-up report.
14	Q:	Do you agree with Staff's assessment?
15	A:	No. There is no basis for shifting a portion of the permanent auxiliary boiler costs from
16		Unit 1 to Common. Additionally, Staff's proposed disallowance associated with the
17		temporary auxiliary boiler was based on an estimate to complete as of the April 2010 cost
18		reforecast. These costs were evaluated during the most recent cost reforecast and the
19		current estimate to complete is \$5.3 million and the actual amount paid through June
20		2010 was \$4.8 million.
21	Q:	To provide the Commission with some context, please explain what an auxiliary
22		boiler does and why was it needed to support the Iatan Project.

An auxiliary boiler is a piece of equipment that produces steam when the main boiler is
not producing enough for the unit's needs. The steam necessary to support the unit
during the start-up process is more than normal operating needs. There are numerous
pieces of equipment throughout the plant that use auxiliary steam including the air heater
coils and air heater sootblowers on the boiler and steam seals and turbine pre-warming
systems on the turbine. Therefore, it was always contemplated that a supplemental
source of auxiliary steam would be needed during the start-up process. During the
second quarter of 2009, KCP&L reviewed equipment information and the requirements
of both quality and quantity of steam that would be required during the start-up of latan
Unit 2. Based on the supercritical components of Iatan Unit 2 and **

A:

engineering staff expressed concern about the Iatan Unit 1 auxiliary boiler's ability to supply a sufficient volume and quality of steam to support Iatan Unit 2.

After evaluation of the available options, KCP&L decided to construct three permanent electrode auxiliary boilers. There was insufficient time to design, fabricate and install these permanent auxiliary boilers in time to support the scheduled start-up of Iatan Unit 2. As a result, in parallel to the design and procurement of the permanent auxiliary boilers, KCP&L rented and installed temporary auxiliary boilers to meet the Unit's start-up needs. The permanent auxiliary boilers include one 60 kpph electrode boiler and two 30 kpph electrode boilers. KCP&L also installed a separator between the Unit 1 and Unit 2 piping to ensure that the steam coming from Iatan Unit 1 meets the quality requirements for Unit 2. The contracts for the temporary auxiliary boilers and the deaerator were awarded to Nationwide Boiler, Inc. on October 6, 2009 and a notice to

** the field

1		proceed was issued for the permanent auxiliary boiler on June 30, 2010. The installation
2		of the permanent auxiliary boiler and related equipment is schedule to begin during the
3		fourth quarter of 2010.
4	Q:	Was there any benefit to using a temporary auxiliary boiler for the start-up process
5		and waiting to install the permanent auxiliary boiler?
6	A:	Yes. The auxiliary steam requirements can be highly variable due to start-up conditions
7		and the ambient temperatures experienced during a given start-up. Having the experience
8		of the initial start-up using the temporary auxiliary boilers allowed us to better identify
9		the overall auxiliary steam needs for the Plant and properly size the permanent auxiliary
0		boiler system. Using the temporary auxiliary boilers during the startup process allowed
11		us to gain this experience and knowledge. Postponing the permanent auxiliary boiler
12		installation also allowed us to minimize congestion and access issues to other contractors.
13		By waiting, we were able to utilize an optimal location for the permanent auxiliary
4		boilers that would have been unavailable earlier in the Project.
15		<u>R&O ITEMS 139 AND 330</u>
16	Q:	Staff's Report recommends disallowance of two R&O items, R&O #139 and R&O
7		#330. Do you agree that these items should be disallowed from the Iatan Project's
8		costs?
9	A:	No, I do not.
20	Q:	Can you explain why KCP&L incurred the costs discussed in these R&O's?
21	A:	Yes. R&O #330 in the amount of \$82,180 was the cost associated with accelerating the
22		vendor's supply of steel for the Ash Piping rack by 3-6 weeks. This steel was needed but

the design documents were prepared after the main mill run was issued, so there were

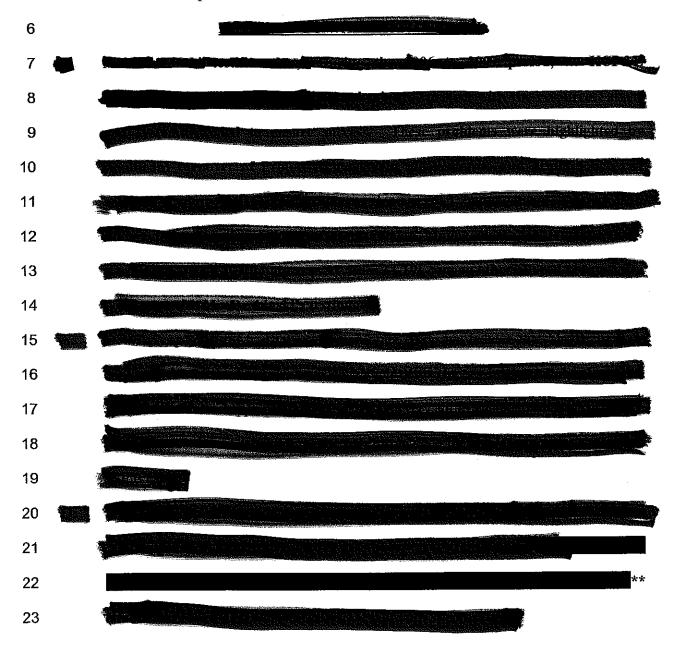
charges to insure that the steel arrived in time for installation. Kiewit's erection sequence changed the original sequence for these mill orders. This steel needed to be expedited to take advantage of the efficiency that Kiewit needed, and to reduce coordination problems on site. I believe that this nominal cost was a benefit to the Project.

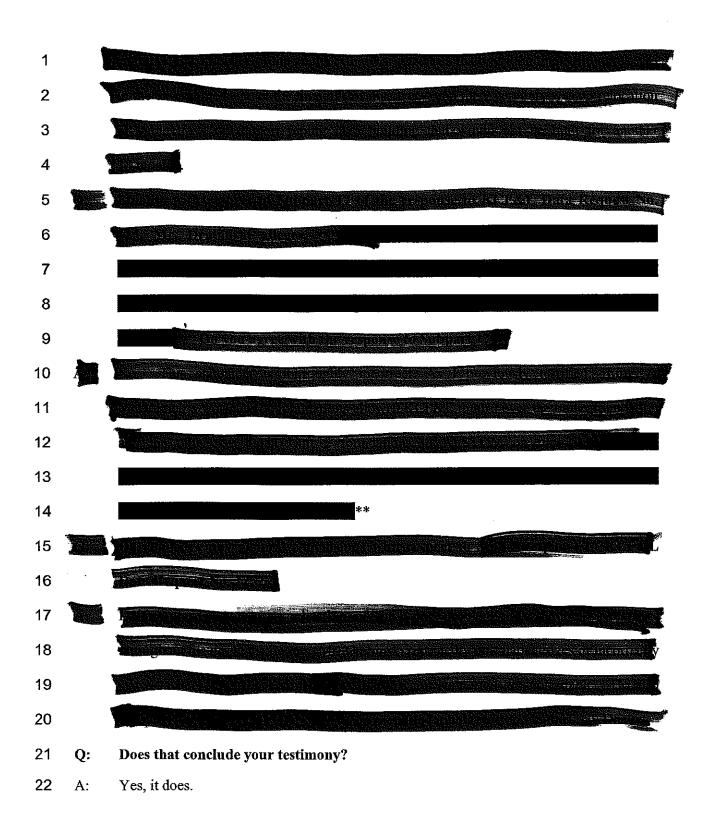
Q:

R&O #139 was for Kissick to add pilings to what we called the North Tank Farm. There are a series of tanks and other structures on the north side of Iatan Unit 1 that were installed for the Iatan Project for the water treatment, wastewater and chemical systems that serve both units. The original design concept for these tanks was to allow the foundations to settle through weight and gravity, and not put structural piling below them. The settling process would take approximately 6 months. In April 2007, Kiewit's proposal for the Balance of Plant work included a number of ways to spread out the work on site over time so that the potential impacts of labor availability and poor productivity did not affect the schedule. Kiewit's plan was based on reducing the peak manpower as much as was practical. Kiewit and our team reviewed the work on site and resequenced the tank farm so that the work would be completed in 2008. This meant that the six months of settling time no longer worked with the schedule, so we asked Burns & McDonnell to design and Kissick to install piling for the tanks. It was the best option at the time we had to smooth out some of the work on site, and it was fortunate that we did the tank farm work earlier than planned.

- How was accelerating work, especially when it costs more money, the best option for the Iatan Project?
- A: Accelerating portions of work on a construction project is something that you consider all the time, especially when doing so improves the overall site coordination or makes the

workers more efficient. If the cost of accelerating a portion of the work is less than not doing it, it would be the most cost-effective solution. If the tank farm work had not been advanced in the schedule and the productivity of all of Kiewit's workers was affected, it would not have taken long for Kiewit's costs to increase well above what we paid in cost for these added piles.





BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Kansas City Power & Light Company to Modify Its Tariffs to Continue the Implementation of Its Regulatory Plan) Docket No. ER-2010-0355			
	AFFIDAVIT OF BRENT C. DAVIS		
STATE OF MISSOURI)		
COUNTY OF JACKSON) ss)		
Brent C. Davis, being	g first duly sworn on his oath, states:		
1. My name is E	Brent C. Davis. I work in Kansas City, Missouri, and I am employed		
by Kansas City Power & Light Company as Iatan Unit 1 Project Director.			
2. Attached here	to and made a part hereof for all purposes is my Rebuttal Testimony		
on behalf of Kansas City Power & Light Company consisting of one hurared things (113)			
pages, having been prepare	ed in written form for introduction into evidence in the above-		
captioned docket.			
3. I have knowle	edge of the matters set forth therein. I hereby swear and affirm that		
my answers contained in the attached testimony to the questions therein propounded, including			
any attachments thereto, are true and accurate to the best of my knowledge, information and			
belief.	Brent C. Davis		
Subscribed and sworn before	e me this Znd day of December, 2010.		
My commission expires:	Notary Fublic STEPHANIE KAY MCCORKLE Notary Public - Notary Seal State of Missouri		
	Commissioned for Clay County My Commission Expires: July 28, 2013 Commission Number: 09451858		

SCHEDULES BCD2010-11 through BCD2010-17

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