

**Minutes of Regular Meeting
Grand River Dam Authority
Board of Directors
Vinita, Oklahoma
August 10, 2011**

A regular meeting of the Board of Directors of the Grand River Dam Authority was held at the Grand River Dam Authority Administration Headquarters, Vinita, Oklahoma, on August 10, 2011. Notice was given pursuant to 25 O.S.A. § 301 et seq. by submitting a schedule of regular monthly meetings to the Secretary of State on December 2, 2010, at 2:24 p.m.; by posting the agenda with the Craig County Clerk's office on August 9, 2011, at 9:54 a.m.; and by posting said agenda at the principal office of GRDA at least 24 hours prior to the meeting.

Chair Chernicky called the meeting to order at 10:08 a.m. The Secretary called the roll; all members were present with the exception of Director Kerns. Chair Chernicky declared a quorum. Ms. Moore introduced guests.

BOARD MEMBERS

David J. Chernicky, Chair	Present
Stephen R. Spears, Chair-Elect	Present
Dewey F. Bartlett, Jr. (arrived 10:15 a.m.)	Present
Greg R. Grodhaus	Present
Betty Kerns	Absent
W. Brent LaGere (arrived 10:27 a.m.)	Present
Chris Meyers	Present

ADMINISTRATIVE

Michael Kiefner, Interim GM/CEO/Director of Investments/COO	Present
Gretchen Zumwalt-Smith, General Counsel	Present
Charles J. Barney, AGM Thermal and Hydro Generation	Present
Carolyn Dougherty, AGM Market Analysis/Strategic Development	Present
Dale Willis, AGM Transmission	Present
Mike Herron, AGM Engineering, System Operations, & Reliability	Present
Donna M. Jones, Secretary	Present

Others present were as follows: Harold Robertson and Lisa McMeen, NEOREC; Randy Bundy, KAMO Power; Mike Doublehead, Stilwell Utilities; Gary Pruet, Pryor MUB; Wendy Gregory, Governor's Office; Jeff Brown, Hilaire Johnson, Rory Grimes, and Melissa Capps, State Auditor's office; Dale Brouk and Bruce Hensley, Tera Miranda; Quint Fuller and Chris Meyer, Turner Roofing; Randy Krehbiel, Tulsa World; Kendra Montana, Grove Sun/Miami News Record; Ivan Williams and Chris Rabb, Williams Construction; Justin Alberty, Tamara Jahnke, Holly Moore, Darrell Townsend, Melanie Earl, Grant Burget, Chuck Atkins, Dave McCollaum, Lana Daugherty, Ronnie

Starks, Mark Schemet, Kevin Couch, Eddie Rogers, Chris Cornish, Chuck Peeples, Brett Hobbs, Eddie Lee, and Roger Walling, GRDA.

REGULAR AGENDA

3. Unfinished Business

3.a. Progress Reports

Regarding the **Monthly Video Update**, Media Services presented a video entitled "GRDA August 2011 Update" highlighting how GRDA is braving the heat in extreme temperatures.

Regarding the FERC compliance update, Dr. Townsend reported that last April, GRDA applied for a temporary rule curve amendment through FERC as GRDA works through some of the reservoir level situations and compliance articles at the FERC level. It was hoped GRDA could work on modeling with the Corps over the next two years to have a more stabilized lake level in the future. The amendment would have gotten GRDA through the Labor Day weekend when GRDA would start dropping the lake as required by Article 401 of the Pensacola license. GRDA asked that instead of bringing the lake down to the 741' elevation, to bring it down to the 743' elevation until mid-September before dropping it to 742' elevation. FERC came back with an additional information request that was very lengthy. GRDA forwarded the request to the Corps of Engineers. The Corps indicated the amount of information it would take to analyze the request would far exceed the timeframe allowed to do it. The Corps also indicated that because of staffing levels, they could not meet the additional information request. The request would basically look at the impact of the change on upstream flooding in the Miami area in August. Although GRDA pointed out the change in the rule curve in August, adaptation was not a direct response to flooding. The flooding rainfalls

generally do not occur in August. Otherwise, in the spring when the rainfall is received, the rule curve would also be at the 741' level. The original intent was not to address flooding but millet planting, Fish & Wildlife, and other issues. It was denied by FERC based on flooding. Moving forward to help stabilize the lake, staff expects to be working with the Corps to address some of the issues regarding the proposed curve but more so for a more stabilized lake level. It would probably take at least a year—maybe two—to model the rule curve based on the additional information requests that FERC asked for on GRDA's temporary rule curve amendment. The temporary rule curve amendment was denied, and GRDA has begun its annual drawdown. GRDA will be seeding millet based on Fish & Wildlife recommendations. In response to questions by Director Chernicky, Dr. Townsend stated the maximum drawdown level would occur on Labor Day, and Mr. Alberty added GRDA has issued a release about the drawdown.

Dr. Townsend reported GRDA also has compliance issues with dissolved oxygen (DO). GRDA is performing DO testing now at Pensacola and Kerr. Some of the drawdown is addressing some of the DO issues downstream at Lake Hudson. The water being released now out of Pensacola is being utilized to address a DO issue below the dam at Kerr. The water at Pensacola is being transferred, and water is being spilled at Kerr over a floodgate to localize and enhance the DO immediately below the spillway. GRDA is generating as needed; the schedule is updated every Monday. The generation is being included in that testing. The DO testing is a FERC requirement. The testing is expected to continue through August and part of September. The data will then be analyzed and sent to FERC to come up with a compliance plan for Pensacola and Kerr dams. In response to a question by Director Spears, Dr. Townsend reported

TVA's recommendation works well at Pensacola when GRDA is able to generate. Drought conditions cause problems. TVA made the same recommendation for the Markham Ferry Project. FERC rejected that plan primarily based on Fish & Wildlife recommendations that GRDA is not addressing the problem 100 percent of the time. GRDA has acknowledged that when it comes to compliance issues, with rule curve and draught conditions, there will be times when GRDA will either have to violate the rule curve at Pensacola or violate DO levels below the dams. To address the issues, GRDA needs to be able to move water. The TVA recommendation was to address the issue while GRDA was generating. Fish & Wildlife is recommending looking at other options like weirs and liquid oxygen. Again, GRDA needs to be able to move water. It has been frustrating for GRDA because if GRDA could move water, it would be able to address DO issues. FERC has ordered GRDA to do additional testing at Kerr.

Regarding the blue-green algae (BGA), Dr. Townsend reported the lake has vastly improved since the July incident. Currently, there is no detection of BGA outbreak or toxins. The sites are monitored every week. All the toxicity levels have come back negative to date.

Regarding the Coal-Fired Complex outage, Mr. Kiefner reported Unit 2 tripped off line last Wednesday at approximately 4:30 p.m. on maybe the hottest day of the year at GRDA's peak time. The outage was the result of a transformer—the exciter—which helps produce megavars for GRDA's transmission system. GRDA contacted SPP, and SPP put GRDA in Emergency Alert Level 3—a level GRDA has never been in. GRDA had an emergency plan in place that is required by NERC. The system operators performed very well and followed the emergency plan. The beauty of GRDA is its

diversity. All three hydro units were put into operation. GRDA also has a great relationship with its customers. All of GRDA's out-of-state customers curtailed load and brought generation on line. GRDA's in-state customers also brought their generators on line. GRDA could not import power because of congestion, but GRDA was able to take care of all its customers' power needs. No one was curtailed. Everyone had power throughout a very important time. GRDA came out of the Emergency Alert the next day at 12:43 p.m. It turned out to be a good experience, a lot was learned, and GRDA is very grateful to its customers and the public—who voluntarily conserved energy during the alert. In response to a question by Director Meyers, Mr. Kiefner reported GRDA has contracts with its customers in which GRDA can call on their generation. NERC directs GRDA's generation and instructed GRDA to turn on the hydro units. In that instance, that side of FERC/NERC trumps the rule curve side of FERC. Mr. Barney's employees worked tirelessly to get that load back on as soon as possible, and the system operators were redirecting transmission and working with SPP.

CONSENT AGENDA

1. Emergency Board Minutes of July 1, 2011, and Regular Board Minutes of July 13, 2011

2. Claims, \$35,088,297.49

4.a. Declare Surplus and Not Necessary to the Business of the District:

- (1) Clarity Puma Display**
- (2) Westinghouse Station Service Transformer**
- (3) Westinghouse Station Service Transformer**
- (4) Two Control Buildings**
- (5) Misc. Control System Components: Monitors, Keyboards/Mouse, Printers
and CPUs**
- (6) 1980 Ford Tractor**

(7) 6310 John Deere Tractor (Transfer to GRDA Coal-Fired Complex)

4.b. Power Purchase and Sale Agreement with Norit Americas Inc.

5.b. Purchase Order Report (* Denotes Addenda Items)

<i>Number</i>	<i>Vendor</i>	<i>Amount</i>
27498	Jim Norton Ford	\$51,239.90
29180	Jim Norton Ford	39,029.01
30388	Standley Systems	4,000.00
30405	Pryor Stone	104,000.00
30453	Oklahoma Roofing	50,466.99
30520	Mercury Marine	20,000.00
30564	ERMI	1,103.00
30647	GE Energy Management	174,154.00
30663	Quality Training Systems	125,250.00
30676	Hydrotex Dynamics	101,730.00
30700	Equipment Technology Inc	66,980.68
30734	Schneider Electric	87,800.00
30740	Alcatel-Lucent	220,575.00
30741	Continental Industrial Supply	171,030.00
30756	Seltech	50,764.00
30799	Air Flight	<u>82,722.72</u>
<i>Total Standard</i>		\$1,350,845.30
8544	Standley Systems	\$113,064.60
30308	Interstate Helicopters Inc	<u>64,836.00</u>
<i>Total Change Orders</i>		\$177,900.60
30337	Peak Substation Services	<u>\$67,467.40</u>
<i>Total Emergency Orders</i>		\$67,467.40
<i>Grand Total Purchases</i>		<u>\$1,596,213.30</u>

5.c. Work Order Report

<i>Number</i>	<i>Title</i>	<i>Amount</i>
RF011-00449	Claremore Centrilift Substation	\$620,000.00
RF011-00457	Pryor City #2 – High Side Expansion	969,000.00
RF011-00458	GRDA 7450/5620SAM Software Upgrade	237,418.65
RF011-00459	Claremore Interconnect-Terminal Add. (Centrilift)	<u>198,000.00</u>
<i>Grand Total Work Orders</i>		<u>\$2,024,418.65</u>

Regarding item 4.b, the items were listed in Surplus Property Transfer Forms from (1) Kerr ECC dated July 18, 2011; (2) Choya Shropshire dated July 21, 2011; (3) Choya Shropshire dated July 21, 2011; (4) Dewey Epps dated July 25, 2011; (5) Brett Littlefield dated May 25, 2011; (6) Chris Cornett dated July 28, 2011; and (7) Chris Cornett dated July 28, 2011.

Director Chernicky moved to approve the consent agenda, seconded by Director LaGere, and voted upon as follows: Chernicky, Grodhaus, LaGere, Meyers, Spears, Bartlett, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

3.b. Assets Committee Recommendations:

3.b.1. Options for Rebuild of Luther to Warwick Tap Transmission Line.

Mr. Herron reported this item has been on the board agenda twice before. At the last board meeting, the Board recommended using Option 5. Under Option 5, KAMO would design and construct the line, turn ownership over to GRDA, GRDA would own and maintain the line, and KAMO would book the value as an intangible asset in the ITS. KAMO has since indicated they cannot obtain funding for the work unless the easements are transferred to KAMO. The Board was not favorable to that option at the time. Because the easement could not be transferred, KAMO cannot get the money. Option 5 is no longer available, so staff is again recommending Option 2. Under Option 2, GRDA and DCS would prepare specifications. DCS would issue the specs, procure bids, and award a contract for construction. DCS would be responsible for contract completion. GRDA would pay DCS for one percent of cost for handling and would also be responsible for paying the contractor the actual cost. This could be done

within completion time requirements—by the end of 2012. Director Chernicky added the Assets Committee met this morning, and he and Director Spears voted to recommend proceeding on Option 2. Director Chernicky moved the Board approve staff's recommendation that the GRDA Board approve Option 2, *GRDA Build and Own/Design Build*, for this project; seconded by Director Spears; and voted upon as follows: Grodhaus, LaGere, Meyers, Spears, Bartlett, Chernicky, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4. New Business

4.c. Assets Committee Recommendations:

4.c.1. Request by Tera Miranda Resort & Harbor for Modification of a Commercial Dock Permit.

Dr. Townsend reported Tera Miranda is requesting to make modifications to their marina following the ice and snow storm earlier this year. Tera Miranda is located on Monkey Island. They are wanting to reduce their total number of slips from 120 to 106 and increase PWC slips from 19 to 44. These are FERC-approved docks that were damaged in the snow storm. They are essentially wanting to put PWC slips in the back of the cove which would dramatically improve access to the cove and the congestion of the area. GRDA asked them to also address an old, unsightly breakwater made of tires. They have replaced the breakwater with a much more modern system that will be more effective. Director Chernicky added this is a replace and rebuild under an existing FERC permit. The new docks will be galvanized steel with double encapsulated foam and concrete walkways that provide additional stability. On behalf of the Assets Committee, Director Chernicky moved the Board approve the commercial dock application as submitted by Tera Miranda to modify their 1999 FERC-approved permit by reducing the

number of boat slips from 120 to 106 and increasing their PWC slips from 19 to 44. This action will reduce congestion and improve public access over their current footprint. Director Spears seconded the motion and added this application will go to FERC for review and approval. The motion was voted upon as follows: LaGere, Meyers, Spears, Bartlett, Chernicky, Grodhaus, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.d. Change Order #4 to Contract 22120, Tonnece Substation Construction Services, with Ernest P. Breaux Electrical, Inc., for Unloading Transmission Structures, Relocating Foundation Bolts, Installing Additional Rock, and Installing Transformer Arrestor Supports and Arrestors

Mr. Herron reported GRDA is receiving steel transmission poles for the Tonnece-Siloam Springs line in the West Siloam Springs area. Under Change Order 4.a., the contractor was requested to unload poles at a lay-down area. The unloading was not part of the Breaux contract. The cost of this change is \$9,942.80. Under Change Order 4.b., there was a mismatch between bolt locations on pier designs and as-received base plates on three columns. The contractor was requested to cut off the bolts, drill new holes in the concrete piers, and epoxy new anchor bolts into place. The cost of this change is \$1,423.28. Under Change Order 4.c., the contractor was requested to provide and spread rock near a 345-kV transformer to allow GRDA to dress out the transformer. The GRDA excavation crew was then called in to do the work. The contractor was owed for the work he had done before he was stopped. The cost of the change is \$2,058.39. Mr. Herron showed slides of the different parts of the transformer which depicted the enormity of the transformer. Under Change Order 4.d., the contractor was requested to assemble and erect the 345-kV transformer arrestor support structure. There are normally brackets placed on the transformer, but because of the size of the transformer,

they were not able to do that. The contractor would also install the arrestors. This was not part of the contract. The cost of the change is \$1,898.89. The total of Change Order #4 is \$15,323.36. The total for all change orders is \$95,677.78, or 3.79 percent of the overall contract amount of \$2,524,600. Director LaGere moved to approve Change Order #4 to Contract 22120 to provide for unloading transmission structures, relocating foundation bolts, installing additional rock, and installing transformer arrestor supports and arrestors; seconded by Director Spears. In response to questions by Director Spears regarding if GRDA was going to unload the structures originally and the cost of drilling base holes, Mr. Herron reported the original plan was that the line construction was going to be going at this time, and GRDA got delayed through right-of-way procurement and issues with getting permits, and the line contractor was not on site to do the unloading. And it was a cheaper and quicker fix to drill new base holes. The motion was voted upon as follows: Meyers, Spears, Bartlett, Chernicky, Grodhaus, LaGere, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.e. Change Order #8 to Contract 20748, Substation Construction Services, Kerr Dam Substation, with BBC Electrical Services Inc. to Provide Primary Service for Four Station Transformers

Mr. Herron reported the original plans for the substation included work to be done by GRDA crews. GRDA crews have not had time to do that work, so GRDA requested the contractor do the work. The work involves providing service to four station transformers—two of which are in the substation, and two are on the lower level. It requires running conduit, pulling wire, and adding steel work in the substation transformer locations. The total for Change Order #8 is \$48,330, bringing the total of all change orders to \$113,452.10, or 7.81 percent of the original contract amount. In

response to a question by Director Bartlett, Mr. Herron stated the reason GRDA's people were not available to do the work was because it took the crew about six weeks to assemble the Tonnece transformer, and that would have been the same crew needed for this job. Director Chernicky moved the Board approve Change Order #8 to Contract 20748 to provide primary service for four station service transformers, seconded by Director LaGere, and voted upon as follows: Spears, Bartlett, Chernicky, Grodhaus, LaGere, Meyers, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.f. Engineering Services Contract with A2V Partners LLC for Pawnee 138-KV Switching Station

Mr. Herron reported GRDA had nine additional engineering projects that needed to be done, this being one. Mr. Herron had approached DCS and received 1100038SOL bulk mailing for the nine projects. It was sent to several engineering firms. Eleven firms responded. GRDA went through the submittals and graded them based on the DCS process. They were rated, and projects were assigned based on the projects the engineers agreed they would be able to do, the number they might be able to do, and which firm was most qualified for the given projects. There are now awards for five of those companies of which these next five agenda items involve. A2V Partners LLC provided a not-to-exceed cost for the design and optional inspection fees for the Pawnee 138-kV switching station. Mr. Herron noted that the substation will be designed for 161-kV spacing and equipment but operated at 138 kV. The project shows up as Pawnee 161 and Pawnee 138 in different locations, and that may lead to confusion. The work will consist of constructing a new three-breaker, 2,000-amp ring bus 161-kV substation; installing a control house including control panels, relays, and batteries with

provision for SCADA and communications; installing power PT as station service transformer; and installing Disturbance Monitoring Equipment (DME). The estimated cost of construction is \$2.5 million. Mr. Herron showed a three-line diagram of the station. A2V Partners quoted a not-to-exceed price of \$304,000 for the design work and \$120,000 for on-site observation if GRDA chooses to use it. If inspection services are needed, staff will come back to the Board for that specific approval. Director LaGere moved the Board approve an engineering services contract with A2V Partners LLC for a not-to-exceed total of \$304,000 for design of the Pawnee 138-kV Switching Station project, seconded by Director Spears, and voted upon as follows: Bartlett, Chernicky, Grodhaus, LaGere, Meyers, Spears, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

**4.g. Engineering Services Contract with Enercon Services, Inc.,
for Design Services for Hulbert Tap Switching Station
and Tahlequah West Substation Addition**

Mr. Herron reported Enercon Services provided not-to-exceed costs for designs and optional inspection services for these two separate projects. The Hulbert Tap Switching Station will be a four-breaker ring bus substation to be operated at 69 kV. The substation is to include three breakers at present, a control house, CCVTs on all the lines, four line panels, space for RTU and communications gear, and a power PT. The bus will be spaced for 161-kV looking toward the future but will be operated at 69 kV. The estimated cost of construction is \$2,077,000. Property needed for the project has not yet been purchased. The line may need to be extended if the property cannot be purchased. In regard to the Tahlequah West Substation Addition project, the substation has an existing square lattice substation structure. The work will consist of installing one 69-kV breaker, with disconnect switches, for an additional line and installing one 69-kV

breaker on an existing line. A control house including control panels, relays, and batteries with provision for SCADA will also be installed as well as new AC and control wiring from the control house to breakers and other equipment. A power PT will be added for station service. The estimated cost of construction is \$918,000. The cost for design work for the Hulbert Switching Station is \$362,200 and \$99,600 for observation if needed. The cost for design work for the Tahlequah West Substation Addition is \$144,200 with \$79,400 for optional construction observation. Enercon's fees in percentage of project cost is 17.44 percent for the Hulbert project and 15.71 percent for the Tahlequah West project. When the numbers first came in, they were 27 percent and 25 percent, respectively; and staff worked with Enercon to cut the numbers back. In response to a question by Director Bartlett, Mr. Herron explained the company was determined based on evaluation of their qualifications and what projects they were willing to do. GRDA could negotiate the costs. If Enercon had not shaved some of their costs, GRDA could have gone with the next company on the list. Director Chernicky moved the Board approve an engineering services contract with Enercon Services, Inc., for a not-to-exceed total of \$506,400 for design of the Hulbert Tap Switching Station and the Tahlequah West Substation Addition projects, seconded by Director LaGere, and voted upon as follows: Chernicky, Grodhaus, LaGere, Meyers, Spears, Bartlett, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.h. Engineering Services Contract with Burns & McDonnell Engineering Company, Inc., for Transmission Line Design Service for Tahlequah-Sleepy Hollow, Feeder 39, and Claremore Interconnect-Centrilift

Mr. Herron reported Burns & McDonnell provided not-to-exceed costs for design of these three projects as well as optional inspection services. At the time of board mailing,

contract language was still being worked out regarding the liability clause, contract termination, warranty, and other wording added by Burns & McDonnell, but there is now an acceptable contract. The Tahlequah to Sleepy Hollow project consists of rebuilding approximately one mile of single circuit 69-kV transmission line with double circuit line, changing from a wood H-structure configuration to monopole steel with circuits on both sides, connecting a new circuit to the Sleepy Hollow Tap transmission line and new breaker position at the Tahlequah West substation, and reusing existing OPGW fiber static. The estimated cost of construction is \$342,000. The Feeder 39 Rebuild project involves about 20 miles of line between the new Pawnee substation and the Fairfax substation. It is currently an H-frame 69-kV line; it will be rebuilt with double-circuit 138-kV and 69-kV, 1590 mcm ACSR conductor on monopole steel structures. This line is being required by the Osage Wind Farm, and GRDA will be reimbursed 100 percent of the cost. The estimated cost of construction is \$9,600,000. The Claremore Interconnect to Centrilift Substation project involves the expansion of Centrilift. Centrilift needs a new substation. GRDA is working with the City of Claremore on the location of the substation and the interrelationship between GRDA and Claremore. GRDA will be providing service to Claremore at 69 kV. They will be building a 69-to-12 substation, and they will own the 69-to-12 side. The line will be about one-half mile long and will be double circuit 161/69 kV. The estimated cost of construction is \$225,000. It is in the industrial area, and it will be a problem getting around in that area. The total design fee for the Tahlequah-Sleep Hollow line is \$103,000. A LiDar company will be brought in to fly all three lines at the same time. There are setup fees involved regardless of how long the line is. Therefore, there is a higher price on the short lines. The total design fee for the

Feeder 39 Rebuild is \$457,500 and \$59,500 for the Claremore Interconnect project. The fee estimates as a percentage of engineering is 30.12 percent, 4.77 percent, and 26.44 percent, respectively. In response to questions by the Board, Mr. Herron reported the old wood poles and wire would be surplus, and the right-of-way is sufficient at 100 feet wide. Director Chernicky moved the Board approve an engineering services contract with Burns & McDonnell Engineering Company, Inc., for a not-to-exceed total of \$620,000 for design of the Tahlequah to Sleepy Hollow Rebuild, Feeder 39 Rebuild, and Claremore Interconnect to Centrillift Rebuild projects; seconded by Director Meyers; and voted upon as follows: Grodhaus, LaGere, Meyers, Spears, Bartlett, Chernicky, yes. *Motion passed (6-yes, 0-no, 0-abstained)*. Mr. Herron noted GRDA's Centrillift project is contingent on Claremore's project happening.

4.i. Engineering Services Contract with Cobb Engineering for MAID-Tahlequah Relay Modifications

Mr. Herron reported this transmission line will be cut in the middle, and KAMO will be installing a substation in the middle (Cedar Crest Substation). As a result, GRDA has to modify its own relaying on both ends because there will be a new set of relays in the center. This contract is to provide that work. The carrier system equipment will be removed from the line and replaced with relays operating on fiber. The MAID Substation control building will be expanded for an additional relay panel. The estimated cost of construction is \$177,000. The total fee quoted by Cobb is \$32,047, or 18.11 percent of the overall cost. This is a relay modification project involving on-site checking of relay panel connections, so that will add to the cost. Director Chernicky moved the Board approve an engineering services contract with Cobb Engineering Company for a not-to-

exceed total of \$32,047 for design of the MAID – Tahlequah Relay Modification project, seconded by Director Chernicky, and voted upon as follows: LaGere, Meyers, Spears, Bartlett, Chernicky, Grodhaus, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.j. Engineering Services Contract with EPS Engineering and Design for Centrilift Substation, Claremore Interconnect Addition, and Ketchum Substation

Mr. Herron reported the Claremore Centrilift Substation project will be a 69-kV substation near the Centrilift plant in Claremore. The station will consist of a breaker with bypass switch, a 69-kV metering point, dead end, bus and a control house. It will feed Claremore's distribution substation at 69 kV and meter at that level. The estimated cost of construction is \$620,000. At the Claremore Interconnect substation, GRDA will need to install a 69-kV breaker in an existing open position in the substation and then install a relay panel and control wiring. The estimated cost of construction is \$198,000. At the Ketchum Substation, GRDA will construct a new 161-kV, three-breaker ring bus and install carrier on the line, a control house, primary metering to an NEO substation, a two-line relay, and one bus panel. GRDA will perform grading and grounding for the new site. The site has not yet been purchased, and NEO does not yet have a site for their substation. GRDA's estimated cost of construction is \$2,159,000. The total fees are as follows: Centrilift Substation, \$139,200; Claremore Interconnect, \$67,800, and Ketchum Substation, \$239,700. The engineering fees are 22.45 percent, 34.24 percent, and 11.10 percent, respectively. Director Meyers moved the Board approve an engineering services contract with EPS Engineering and Design, Inc., for a not-to-exceed total of \$446,700 for design of the Centrilift Substation, the Claremore Interconnect Addition, and the Ketchum Substation projects; seconded by Director

LaGere; and voted upon as follows: Meyers, Spears, Bartlett, Chernicky, Grodhaus, LaGere, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

**4.k. SWPA Agreement for Access Rights
in Substation Buildings for FERC Compliance**

Mr. Herron reported GRDA has an existing agreement with SWPA for equipment that is installed in their facilities. GRDA is in the process of changing out some of the communications. It is used for metering purposes and operational data GRDA receives from SWPA—to watch what is happening in their substations. GRDA is modifying its equipment at three of those substations: Allen Tap, Gore, and Weleetka. Because GRDA is modifying those substations and because SWPA wants detailed information about what GRDA is installing, the agreement had to be modified first. The revised agreement covers the proposed changes and details. There is no cost involved; it is just permission to be in their substations. Director Spears moved the Board approve the Communications Agreement between United States of America and Grand River Dam Authority as presented, seconded by Director LaGere, and voted upon as follows: Spears, Bartlett, Chernicky, Grodhaus, LaGere, Meyers, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.l. Engineering Cost Percentages Report Update

Mr. Herron reported he had provided the Board a similar report at the last board meeting. It has been updated with the new information of the nine new projects. Mr. Herron also showed the consultant design cost history which was sorted based on percentages. The highlighted items are the new companies that have been added. Staff will continue to monitor consultant costs and use that information in future negotiations.

No action was deemed necessary at this time. In response to a question by Director Bartlett, Mr. Herron reported that when dealing with major consulting firms, the prices are higher. There is more overhead, and their payroll is higher. They also require more. If GRDA makes any changes, that requires a change order. A smaller company will go ahead and make changes if they are not exorbitant. However, the smaller companies are not able to do multiple jobs at the same time within the time frame needed.

4.m. Payment of Operating Permit Fees in the Amount of \$305,466.38 to Oklahoma Department of Environmental Quality for the Coal-Fired Complex

Mr. Barney reported this is the annual operating permit fee. On advice of counsel in past years, this is brought before the Board to authorize the payment. The payment last year was much the same as this year's. The payment is based on the Oklahoma Department of Environmental Quality's (ODEQ) cost to monitor and administrate GRDA's permit. GRDA is in regular contact with ODEQ. Director Chernicky moved the Board of Directors authorize payment of \$305,466.38 to the Oklahoma Department of Environmental Quality (ODEQ) in regard to their 2011 administrative permit fee for operation of GRDA's Coal-Fired Complex, seconded by Director LaGere. Director Bartlett asked if GRDA has the ability to audit the cost. Mr. Barney stated ODEQ goes through a process involving members of the public who take input from industry and various stakeholders, and they arrive at recommendations on ratios. The dollars are based on emissions from the plant. The motion was voted upon as follows: Bartlett, Chernicky, Grodhaus, LaGere, Meyers, Spears, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.o. Approval to Pay FERC Annual Charges for FY 2011 Hydropower Administrative Cost

Mr. Barney reported this annual charge is associated with the fees for Pensacola Dam, Kerr Dam, and the Salina Pumped Storage Project. Mr. Barney recommended authorizing the payment of \$919,923.18 to FERC for their 2011 hydropower administrative charges. This charge is 24 percent higher than last year's charge. Staff has reviewed the fees. It appears GRDA has no choice but to pay the charges to continue to operate the hydroelectric facilities. Staff will keep an eye on the fees and establish if they are appropriate for GRDA's operations. The charge methodology is similar to last year's except the rates are higher. Director Spears asked what GRDA's recourse is if it is felt the charges are unreasonable. Mr. Kiefner reported GRDA protested the fees about three years ago and did get some money back. However, the fees have been increasing since that time. Ms. Zumwalt-Smith added the fees are based on the nameplate capacity of the dams, and FERC had the nameplate capacity incorrect on one of the dams. GRDA protested the charge and prevailed. Mr. Barney added the nameplate capacity was correct on this invoice. Director Chernicky moved the Board of Directors authorize payment of \$919,923.18 to the Federal Energy Regulatory Commission (FERC) in regard to their 2011 hydropower administrative charges bill for GRDA's Pensacola Dam, Kerr Dam, and Salina Pumped Storage Project; seconded by Director LaGere; and voted upon as follows: Chernicky, Grodhaus, LaGere, Meyers, Spears, Bartlett, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.n. Bid Award Recommendation for Contract 28551, Pensacola Powerhouse Roof Replacement

Mr. Barney introduced Chuck Atkins, Superintendent of Hydro Operations. Mr. Atkins reported the roof has numerous and increasing leaks. The roof needs replaced to prevent potential damage to the electric generators and to provide for safety. GRDA went through an external approval process which involved FERC and the State Historical Properties Organization (SHPO). Any change to an operation requires FERC approval. As the powerhouse and dam are on the National Historic Registry, GRDA had to also get approval from SHPO. SHPO has approved GRDA to proceed with the roof replacement. The paving cap stones weigh 800 pounds. Electric generators must remain in service during the replacement, and there are certain roof load limitations. The stones must be moved on dollies; there is no access to cranes that will reach from the east to west end of the powerhouse. The old-style tar sealant must also be removed. Rain entry must be prevented, so the work must be done in sections. The project must be managed to not interfere with GRDA operations or schedule requirements. In consultation with Burns & McDonnell, design specifications were developed. First, the old, heavy concrete-covered roof system must be safely removed. Then, a new, modern roof system designed for long life must be provided. The specifications allowed the bidders to select a roof system from well established manufacturers of such systems, and the offered system must be the manufacturer's premium and heavy duty grade for hail and fire resistance. The specifications required a contractor's warranty of two years and a manufacturer's warranty of twenty years and compliance with GRDA policy. Firm price bids were solicited in accordance with GRDA policy. One bidder, Williams Construction, met all the specifications and took no exceptions. The other bids did not meet GRDA requirements for a commercial roof

expertise and premium heavy-duty materials. Discussion followed regarding Director Chernicky's question about using a heavy-duty membrane type sealer over the top and regarding the construction and structure of the roof. Mr. Barney added the recommended roofing system is two-layer, with inner membrane and a cap sheet. It will be necessary to first install insulating boards that are sloped and shaped to provide drainage to the drain points. It is a standard roofing system for this type of application. It was recommended that the heavy-duty membrane and outer cap sheet be used to resist hail damage. GRDA required a polyester fabric and a minimum thickness of those fabrics and layers. The specifications also required manufacturers that are well established and dominant in this area. Director Meyers moved the Board approve the award of Contract 28551, Pensacola Power House Roof Replacement, to Williams Construction Company in the amount of \$667,209 as they are the bidder with the lowest bid conforming to specifications, and other bids did not meet requirements for commercial roof expertise and premium heavy duty materials. Director LaGere seconded the motion, and the motion was voted upon as follows: Grodhaus, LaGere, Meyers, Spears, Bartlett, yes; Chernicky, absent. *Motion passed (5-yes, 0-no, 0-abstained).*

4.p. Discussion and Review of Ongoing Power Purchase and Sale Agreement Negotiations with Stillwater Utilities Authority

Mr. Kiefner reported GRDA provides Stillwater with power. Their contract will expire in October 2012. Staff has been in negotiations with Stillwater for quite some time. GRDA would like to keep Stillwater as a customer. Staff, along with OMPA, recently provided some projections for cost of power. Last Monday, they had on their

agenda they were going to terminate the contract with GRDA and go with OMPA. Senior staff attended the meeting. The item was tabled before staff got to the meeting. However, GRDA and members of the public were allowed to speak. Stillwater expressed a desire for GRDA to work with them to come up with a uniform set of assumptions for both OMPA and GRDA to use, so they could make an apples-to-apples comparison of GRDA's prices compared to OMPA's prices. GRDA has committed to do that, and staff also recommended a possibility of a third-party consultant to look at both rates to give them an idea of where both providers would be. Staff is working with them and are optimistic Stillwater will be able to make a good decision for their future. In response to a question by Director Meyers about coal and gas prices, Mr. Kiefner stated staff used the futures prices and known indices to project escalations. It is believed OMPA had a set price of 5.10/ncf, so the City of Stillwater was not able to make a good comparison. Right now, GRDA can buy gas just as cheaply as OMPA can. GRDA is consistently cheaper than OMPA on its purchases at the Redbud plant. Director Grodhaus stated he did not understand why Stillwater is not providing all bidders a common set of assumptions to use as GRDA has several million dollars of environmental enhancements that are coming in the future that OMPA does not have. Mr. Kiefner stated Stillwater admitted they were not aware what assumptions were used by either provider in their projections. Staff was hoping to meet with the Director of Stillwater Utilities today, but because of power outages, he was needed in Stillwater. There are plans for continued dialogue with them to make sure there is an apples-to-apples comparison. Mr. Kiefner thanked Director Spears for his involvement as the city representative. Director Spears added he does not want to overstep his bounds as a

board member and asked if there were any objections from the other board members to his working with staff on the contract. Director Kerns is also involved in the negotiations as she is from Stillwater. The other directors expressed their desire for Director Spears to continue in that capacity. Director Chernicky moved to appoint Directors Spears and Director Kerns to work on the contract, seconded by Grodhaus, and voted upon as follows: LaGere, Meyers, yes; Spears, abstained; Bartlett, Chernicky, Grodhaus, yes. *Motion passed (5-yes, 0-no, 1-abstained).*

4.q. Other New Business

There was no other new business.

5. Reports

5.a. Board of Directors Committee Reports

1. **Assets Committee:** Director Chernicky had no further report.
2. **Audit Committee:** Director LaGere had no report.
3. **Coal Committee:** Director Chernicky had no report.
4. **Marketing Committee:** There was no report.
5. **Policies and Procedures Committee:** Director Bartlett had no report.
6. **Long-Range Planning Committee:** There was no report.
7. **Ad Hoc Committee:** Director LaGere had no report.

6. Executive Session for the Purpose of Discussing the Employment, Hiring, Appointment, Promotion, or Resignation of the General Manager/Chief Executive Officer and Director of Investments

Director Chernicky moved to go into executive session at 11:45 a.m., seconded by Director LaGere, and voted upon as follows: Meyers, Spears, Bartlett, Chernicky, Grodhaus, LaGere, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

Director Chernicky moved to return to regular session at 12:00 p.m., seconded by Director Meyers, and voted upon as follows: Spears, Bartlett, Chernicky, Grodhaus, LaGere, Meyers, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

7. Action on Executive Session Items

a. Action, As Necessary, Related to the Employment, Hiring, Appointment, Promotion, or Resignation of the General Manager/Chief Executive Officer and Director of Investments.

Regarding item 7.a., no action is deemed necessary at this time.

Director Chernicky moved for adjournment at 12:01 p.m., seconded by Director Meyers, and voted upon as follows: Bartlett, Chernicky, Grodhaus, LaGere, Meyers, Spears, yes. *Motion passed (6-yes, 0-no, 0-abstained).*



Donna M. Jones, Secretary

DATE APPROVED:

September 14, 2011
GRDA Board of Directors