

**Minutes of Regular Meeting
Grand River Dam Authority
Board of Directors
Tulsa, Oklahoma
January 8, 2019**

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 January 8, 2019. 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 November 27, 2018, at 1:12 p.m.; by posting the agenda with the Craig County Clerks' offices on January 7, 2019, at 9:56 a.m.; by posting said agenda at www.grda.com; and by posting said agenda at the principal office of GRDA at least 24 hours prior to the meeting.

Chair Kimball called the meeting to order at 10:02 a.m. The Secretary called the roll. All members were present, and Chair Kimball declared a quorum. Mr. Philpott introduced guests.

BOARD MEMBERS

Tom Kimball, Chair	Present
James B. Richie, Chair-Elect	Present
Pete Churchwell	Present
Dwayne Elam	Present
Mike Lewandowski	Present
Chris Meyers	Absent
Joseph Vandevier	Present

ADMINISTRATIVE

Daniel S. Sullivan, Chief Executive Officer	Present
Tim Brown, Chief Operating Officer	Present
Lorie Gudde, Chief Financial Officer/ Corporate Treasurer	Present
Steve Wall, Chief Information Officer	Present
Heath Lofton, General Counsel	Present
Ellen Edwards, Executive VP – Compliance	Present
Brian Edwards, Executive VP – Law Enforcement/Lake Operations	Present
John Goodwin, Executive VP – Human Resources	Present
Nathan Reese, Executive VP – External Relations	Present
John Wiscaver, Executive VP – Corp. & Strategic Communications	Present
Mike Herron, VP – Engineering, System Operations and Reliability	Present
Darrell Townsend II, VP – Ecosystems/Watershed Management	Present
Robert Ladd, VP – Grand River Energy Center Operations	Present
Steve Jacoby, VP – Hydroelectric Projects	Present
Mike Waddell, VP – Transmission and Distribution Operations	Present
Ed Fite, VP – River Operations and Water Quality	Present
Justin Alberty, VP – Corp. & Strategic Communications	Present
Sheila Allen, Corporate Secretary	Present

Others present were as follows: Rusty Flaming, Grand Times; Tom Elkins, Cherokee Nation; Kristin Sexter, WorkWise Productions; Mike Doublehead, TPWA; Jaren Crisp,

Pryor MUB; Jeff Brown, Melanie Earl, Michelle Day, Ash Mayfield, Brylee Harbuck, Jennifer Marquis, Holly Moore, Spencer Moore, Tamara Jahnke, Christine Burmaster, West Hilburn, Matt Martin, Laura Townsend, GRDA.

Election of Officers

a. Nominations for Treasurer

b. Election of Treasurer

c. Nominations for Secretary

d. Election of Secretary

e. Nominations for Secretary Pro Tem

f. Election of Secretary Pro Tem

Chairman Kimball declared nominations for Treasurer, Secretary, and Secretary Pro Tem open, and moved to nominate Lorie Gudde as Treasurer, seconded by Director Vandevier. There being no other nominations, the nomination was voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

Chairman Kimball moved to nominate Sheila Allen as Secretary, seconded by Director Vandevier. There being no other nominations, the nomination was voted on as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

Chairman Kimball moved to nominate Susan Wagoner as Secretary Pro Tem, seconded by Director Vandevier. There being no other nominations, the nomination was voted on as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

CONSENT AGENDA

2. December Claims, \$39,458,975.92.

4.a. Resolutions of Commendation

- 1) Edward L. Rothermel

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

Description and/or Make of Item	Serial Number	Model Number
Gauge, Pressure, 0-30 PSIG, 2-1/2" Dial, 1/4" NPT Bottom Connection,	Ashcroft	1008S
Gauge, Pressure, 0-200 PSIG, 6" Dial, 1/4" NPT Bottom Connection, Brass,	Ashcroft	60 1010A 02L 1200
Gauge, Pressure, 0-1000 PSIG, 4-1/2" Dial, 1/4" NPT Bottom Connection,	Ashcroft	N/A
Gauge, Pressure, 0-60 PSIG, 4-1/2" Dial, 1/4" NPT Lower Back	Ashcroft	45 1017A 02B 60
Gauge, Pressure, -30 To 60 PSIG, 4-1/2" Dial, 1/2" NPT Bottom	N/A	N/A
Gauge, Pressure, 0-1500 PSIG, 4-1/2" Dial, 1/2" NPT Bottom Connection,	Ametek	1982-150055
Gauge, Pressure, -30 To 100 PSIG, 4-1/2" Dial, 1/2" NPT Bottom	Ashcroft	45-1279AS
Gauge, Pressure, 0-2000 PSIG, 4-1/2" Dial, 1/4" NPT Lower Back	Ametek	1322
Gauge, Pressure, 0-2000 PSIG, 4-1/2" Dial, 1/2" NPT Bottom Connection,	Helicoid	397717
Switch/Gauge, Pressure, 0/8" Water Column, 1/8" NPT Female Bottom	Dwyer	3008
Gauge, Sight, Oil	Foster Wheeler	3956B30H009
Gauge, Pressure, 0-100 PSIG, 4-1/2" Dial, 1/4 NPT Bottom Connection,	Ashcroft	45-1377SS-02B
Kit, Repair, Glass Gauge	Kenco	A1145K-22
Kit, Repair, Glass Gauge	Kenco	5736-K-70
Kit, Repair, Glass Gauge	Kenco	A1145K-10
Tube, Siphon, Loop, 1/2"	Ashcroft	50-1098CD
Glass, Sight, Reflex, #5	Macbeth	B5
GASKET: SIGHT GLASS, 1-11/32 X 8-21/32 X 1/32"	N/A	N/A
Ring, Sight Glass, Hycar	Jerquson	G-24
BALL: CHECK	Jerquson	P-1-I
COUPLING: DRIVE SHAFT, ROUGH BORE, W/ SHIM PACK, SS	Rexnord	26630
ASSEMBLY: REPLACEMENT HARDWARE KIT	Rexnord	16323-19
DISC: REPLACEMENT PACKS SS ONLY	Rexnord	10957
NOZZLE: DISTRIBUTION SYSTEM, MODEL IC	Munter	70201
NOZZLE: DISTRIBUTION SYSTEM, MODEL 1B	Munter	70101
TURBULATOR: SIZE B	Munter	N/A
ORFICE: SIZE B	Munter	N/A
TUBULATOR: 2 1/2"	N/A	N/A
ORFICE: SIZE C	N/A	N/A
GASKET: FITS ALL NOZZLES	Munter	N/A
KIT:	Westinghouse	373B331G09
COL:	Westinghouse	505C806G01
FUSE BLOCK: FOR 1/4" X 1 1/4" FUSES, 3AG MDL OR MDX	Westinghouse	257A574G01
RETAINER: OIL SEAL INPUT	N/A	N/A
Module, Motor Control, Voltage, 120 VAC, 60 HZ	Monitrol	2000
INDICATOR: VERITRAK	N/A	N/A
ELEMENT: SCREW-IN TYPE FOR WATER HEATING, 2500W,	N/A	N/A
METER: OUTPUT, FP CONTROLLER	Fischer Porter	158C002U01
SWITCH: PUSHBUTTON, INTERLOCKING	Fischer Porter	154D097U01

PULLEY: ASSEMBLY, W/SHAFT, FP RECORDER	Fischer Porter	655B068U01
SPOOL: CHART DRIVE, TIMING, FP RECORDER	Fischer Porter	413A010U01
SPRING: RELAY VALVE, FP CONTROLLER	Fischer Porter	424A010T12
LATCH: UPPER, FP CONTROLLER	Fischer Porter	326A070U01
PIN: HINGE, BEZEL	Fischer Porter	396C204U01
PIN: HINGE, BEZEL, RIGHT SIDE	Fischer Porter	396C232U01
BELT: RECORDER, FP CHART DRIVE, TIMING	Fischer Porter	393D001U01
BELT: RECORDER, FP CHART DRIVE, REWIND	Fischer Porter	393D001U02
BUSHING: SPACER (IDLER), FP CHART DRIVE	Fischer Porter	104D056U01
SHAFT: IDLER, FP CHART DRIVE	Fischer Porter	624B015U01
PULLEY: DRIVE, FP CHART DRIVE	Fischer Porter	413E034U01
SCREW: SHOULDER, SHOULDER DIA. 3/16", OVERALL LENGTH 3/8"	Fischer Porter	396C197U01
SHAFT: REWIND ASSEMBLY, FP CHART DRIVE	Fischer Porter	635B031U01
ROD: GUIDE	Fischer Porter	402E181U01
BRACKET: CAM PLATE, FP RECORDER	Fischer Porter	355K351U01
LIFTER: PEN	Fischer Porter	649B038U01
HOLDER: PEN CARRIER, FP CHART DRIVE	Fischer Porter	624B198U01
PET: CHART (ASSEMBLY)	Fischer Porter	639B008U01
MOTOR: TORQUE ASSEMBLY, FP CHART DRIVE, 1ST PEN	Fischer Porter	669B047U01
MOTOR: TORQUE ASSEMBLY, FP CHART DRIVE, 2ND PEN	Fischer Porter	669B047U02
MOTOR: TORQUE ASSEMBLY, FP CHART DRIVE, 3RD PEN	Fischer Porter	669B047U03
LINKAGE: LEVER ARM, FP CHART DRIVE	Fischer Porter	647B043U01
LINKAGE: LEVER ARM, FP CHART DRIVE	Fischer Porter	647B122U01
CABLE: FLAT ASSEMBLY	Fischer Porter	677B183U01
LINK: ASSEMBLY, ROD COUPLING	Fischer Porter	648A141X99
LINKAGE: COUPLING ROD, FP CHART DRIVE	Fischer Porter	648B022U01
LINKAGE: INNER PEN ARM, FP CHART DRIVE	Fischer Porter	647B167U01
LINKAGE: OUTER PEN ARM, FP CHART DRIVE	Fischer Porter	647B166U01
LINKAGE: PEN ARM (GREEN), FP CHART DRIVE	Fischer Porter	647B168U01
Bearing, Pillow Block, 2-7/16", NOZZLE: SPRAY, 2 1/4"	Rexnord	MEP2207
MOTOR: ISOLATION VALVE ACTIVATOR	N/A	N/A
MOTOR: BYPASS VALVE ACTIVATOR	N/A	N/A
BOLT: HH, SS, NC, SIZE 3/8" X 1-3/4"	N/A	N/A
PUMP: S/N NP88-1386, SUMP W/MOTOR, 120GPM	Nagle	N/A
Flex Element, For CTC-700.1125 (Old Style Driveshaft)	Addax	200917-070
Kit, Hardware, Stainless, For CTC-700.1125 (Old Style Driveshaft)	Addax	600567-2096
Shaft, Drive, Sectional Assembly, Motor End.	Rexnord	301 DBZ-X/SF
Shaft, Drive, Sectional Assembly, Gearbox End.	Rexnord	301 DBZ-X/SN
Pack, Shim, .291", 301 Stainless, Half Hard, For 301 DBZ-X/SN Coupling	Rexnord	620359
Assembly, Seal Disc, 5 Sections, AP, 13.3 Diameter, 8000	Hudson	D8053
1 Lot General Electrical Material	N/A	GREC 090 Section
1 Lot General Instrument Material	N/A	GREC 143 Section
1 Lot Rail Car Inventory	N/A	GREC 259 Section
Bracket: Header; Lot of 6		Securiton WFB-62
Bracket: Header; Lot of 6		Securiton CHB-62
Tool: Blind Nut; Lot of 3		Securiton BPT-1
Reader: Card; Lot of 2		Schlage 808-S & 804-S
Warning: Horn; Lot of 5		Benjamin 8590-115v
Warning: Horn; Lot of 16		Vibratone 450
Warning Horn; Lot of 4		Vibratone 450 w/PR2 Projector
Enclosure: Aluminum		Bogen FS WB
Warning: Horn; Lot of 2		Thomas 8170
Speaker: Horn		WAH
Driver: 30 Watt RMS; Lot of 5		Bogen DR-30T
Speaker: Wall Mount		WBS8T725
Speaker: 15 Watt		Bogen SPT-15A
Speaker: Cover 8"; Lot of 8		
Processor: 8 Door		Schlage 808-5
Power Supply Module		Schlage 3708A-1

Monitor: 4 Switch		Schlage 774
Switch: Ext: Lot of 7		PB2
Bracket Z		Securiton Z-62
Ready Index: 10 Tab - 10 Boxes		11134 Avery
2" 3 Ring Binder - 16 Cases of 12		Round Ring
2" 3 Ringer Binder - 9 Cases of 12		Round Ring
Clark Forklift / GPS-25 / 1987		
High Pressure Sodium Light Fixtures: Lot of 20		VML0-0-900
2013 Honda Civic Sedan		Civic CNG
2013 Honda Civic Sedan		Civic CNG

4.c. Power Cost Adjustment (PCA) of \$0.00052 per kWh for February 2019

4.d. Power Purchase and Sale Agreement – Batchelor & Kimball, Inc.

4.e. Recommendation to Award Contract 42434 – Railroad Track Services

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

Standard Purchase Orders & Contracts		
PO Number	Vendor Name and City State	Amount
42546	TECHLINE INC., VAN ALSTYNE, TX	68,400.00
42542	PRYOR STONE INC., PRYOR, OK	389,900.00
42541	VALMONT INDUSTRIES, VALLEY, NE	1,951,015.00
42544	SABRE INDUSTRIES, SIOUX CITY, IA	1,027,406.00
42549	STUART C IRBY, TULSA, OK	3,144,783.28
42550	DISTRAN STEEL LLC, PINEVILLE, LA	268,353.00
42551	ASC ENVIRONMENTAL SERVICES INC., SEAGOVILLE, TX	100,000.00
96727	PINNACLE BUSINESS SYSTEMS, EDMOND, OK	71,415.36
42552	INDUSTRIAL WELDING & TOOL SUPPLY DBA GAS & SUPPLY, TULSA, OK	51,051.50
42553	AIR PRODUCTS AND CHEMICALS, INC., ALLENTOWN, PA	450,000.00
42554	SAPPHIRE WINDOW CLEANING LLC, TULSA, OK	27,320.00
42560	KEMCO INDUSTRIES, SANFORD, FL	61,065.00
42434	AM-RAIL CONSTRUCTION INC., TULSA, OK	254,700.00
42363	A2V PARTNERS LLC, SPRINGFIELD, MO	377,364.00
Grand Total Standard POs & Contracts:		\$8,242,773.14
Change Orders & Renewals		
PO Number	Vendor Name and City State	Amount
42176	AMERICAN TIRE DISTRIBUTOR, TULSA, OK	20,000.00
41485	1577 PRODUCTIONS INC., OKC, OK	1,161.00
96747	SHI INTERNATIONAL CORP, SOMERSET, NJ	55,497.00
96774	PINNACLE BUSINESS SYSTEMS, EDMOND, OK	81,880.32
42556	CONSOLIDATED COMMUNICATIONS, WESTFIELD, NY	67,116.00
96853	PINNACLE BUSINESS SYSTEMS, EDMOND, OK	204,962.56
41078	EXPRESS PROFESSIONAL SERVICES INC., OKLAHOMA CITY, OK	900,000.00
Grand Total Change Orders & Renewals:		\$1,330,616.88
Grand Total		\$9,573,390.02

Director Churchwell moved to approve the consent agenda as presented, seconded by Director Richie, and voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

REGULAR AGENDA

1. Special Board Minutes of November 26, 2018.

Director Vandevier moved to approve the special Board minutes of November 26, 2018, seconded by Director Elam, and voted upon as follows: Churchwell, yes, Elam, yes, Kimball, yes, Lewandowski, yes, Richie, abstain, Vandevier, yes. *Motion passed (5-yes, 0-no, 1-abstained).*

3. Unfinished Business

3.a. Progress Reports

(1) Recognition of John Goodwin

(2) Introduction of Robert Braun

(3) Current Operations Reports

a) Monthly Video Update – GRDA January 2019

- I am GRDA – Travis Henshaw
- I am GRDA – Laurel Swift

Mr. Sullivan recognized Mr. John Goodwin for his contributions to GRDA and introduced Mr. Rob Braun who will be filling Mr. Goodwin's position as the Executive Vice President – Human Resources. He also recognized Mrs. Kristine Sexter with WorkWise Productions for her work in finding Mr. Braun. Mr. Sullivan said she sorted through over 100 applicants for the position. He commented that Mrs. Sexter had suggested GRDA bring in Mr. Braun for his final interview, but making certain to invite his spouse. Mr. Sullivan said he thought this was a great idea, particularly with the move they would be anticipating from Kansas City, Missouri. This would give a better understanding of what GRDA is all about to both of them, and how it will impact the family. He thanked Mrs. Sexter for all of her help with everything at GRDA.

Mr. Sullivan reported that GRDA's confined space rescue rope team held their quarterly training at Northeast Tech-Pryor campus last month. The training was led by

Brandon Merritt and the group worked on drills that included repelling down a five-story tube to perform a patient rescue. Once on the bottom, inside the confined space, the team members provided necessary emergency medical responder care. Following that, they then removed the victim by pulling him back up the tube to the top. Next, the team repelled from the fifth floor and practiced locking off to perform drills and lastly, repelling down to rescue a suspended victim. He showed photos of the training and said it was a great opportunity for GRDA law enforcement officers at the Grand River Energy Center (GREC), and everyone involved, as there was an incident at the dam approximately a month ago.

Mr. Sullivan told the Board GRDA Police recently assisted other area law enforcement agencies in search and rescue efforts. On December 18, he said GRDA Police assisted in a massive search in hopes to find a missing person. The team searched for eight hours on foot, covering approximately 68 miles total as a team, which included over 1,200 acres of rough terrain and frequent elevation changes. In a separate set of circumstances, he said officers also assisted in searching for another missing person last week.

Mr. Sullivan said there was an Emergency Action Plan (EAP) exercise held December 19, 2018, at the Training, Safety and Environmental Building (TSE) at the GREC. The EAP contains all the steps that would need to be taken in order to deal with certain emergency situations at GRDA dams and associated structures, and is an important part of the Authority's ongoing hydroelectric operations and overall preparedness. He stated the Federal Energy Regulatory Commission (FERC), which licenses each of GRDA's hydroelectric facilities, requires having these EAPs in place and reviewing them on a regular basis. Mr. Sullivan told the Board agencies and organizations in attendance this year included American Red Cross, Burns & McDonnell, Ft. Gibson Powerhouse personnel, GRDA, Cherokee County, Mayes

County, Muskogee County, Wagoner County, Oklahoma Emergency Management, FERC, MESTA, National Weather Service, Oklahoma Highway Patrol, United States Army Corps of Engineers-Tulsa District, along with several area Fire, Police and Sheriff Departments.

Mr. Sullivan reported that recently Mr. Jerry Cook and Mr. Cameron Philpott of GRDA's External Relations Team delivered GRDA public power partner signs. He stated GRDA is proud to provide this new signage recognizing their community involvement with GRDA, and showed photographs of the signs.

Mr. Sullivan said GRDA employees came together and raised nearly \$18,000 in 2018, benefitting 40 different charities (local, state, nationally & internationally). He explained the support came from employees who connected with a cause during the Oklahoma State Employee Charitable Campaign (SCC). The yearly campaign provides state employees the opportunity to contribute, through voluntary payroll deduction, several fully accountable private nonprofit, social, health and welfare organizations. Support also came from fundraisers initiated by GRDA's Employee Charitable Campaign Committee throughout the year.

Director Richie left the room at 10:35am, and returned at 10:38am.

Mr. Sullivan introduced Mr. Steve Wall to give the Board an update on the Enterprise Resourced Planning (ERP) Project.

3.a,3,b, Enterprise Resource Planning (ERP) Project Status Update – 4th Quarter 2018

Mr. Wall greeted the Board and said Miya Boyken recently resigned, but left the team with a very detailed plan and notes. He stated the project is in very good shape and the team is diligently working to stay on track. Mr. Wall Introduced Mr. West Hilburn and asked him to provide the update for the Board.

Mr. Hilburn provided project highlights, to include the November 2018 ERP Team visit with Sopris and Starboard on-site in Vinita and the Grand River Energy Center

(GREC), Sprint Sessions beginning in September 2018, early Sprints focused on setup and configuration of modules (Finance, Human Resources and Inventory), and later Sprints that will be focused on data refinement, integration design and reporting. He said there is still work to do in Inventory and Maximo integration since there are a lot of moving parts to this process. Although, Mr. Hilburn stated the team begins meetings again next week to make certain tasks are caught up. He went over the ERP project expenses already approved by the Board of Directors, and said the implementation is on track for this year, and the amount for purchasing 32 Microsoft Dynamics 265 licenses and Azure Hosting Services will not run out in January 2020. GRDA will need to renew the ERP licenses and hosting services for a 3-year term then, as it will require Board approval. He showed a graph of the project budget to date showing the invoices paid, remaining project budget, and the portion for Managed Services. Mr. Hilburn showed the Board what the ERP front page (all modules) will look like, and said once things are more complete each person will only see the modules they will be working in. Right now all can be seen. Mr. Hilburn showed screen shots of a Personnel Management Dashboard for Human Resources and for Finance. He commented there has been good feedback from those looking at the data currently. Mr. Hilburn stated the next steps are to continue with design, build, and data refinement to populate the TEST environment of the ERP. The next update will be provided in April 2019. Future integration under consideration are Travel Management and Fleet Management to continue with centralizing financially impacted areas of GRDA.

Director Vandevier asked Mr. Hilburn what is keeping him up at night on this. Mr. Hilburn said he is just making certain he understands what needs to be done and is able to execute. He said the team has been doing great keeping everyone on track and staying in touch. Mr. Hilburn said he does not see GRDA getting behind, but there are items moving slower than anticipated. Director Vandevier asked if there is any feedback

on how challenging or successful the Sprints were. Mr. Hilburn said the people who have been using it seem to like it much better and say it is much easier to access information.

Director Elam asked if the team feels like they are “over the hump” or still “climbing the mountain” in the transition. Mr. Hilburn said I think we are over the hump but I think it is like a snowball, as we add more components it will get larger and more difficult.

Mr. Lewandowski asked how this would affect system security. Mr. Wall said GRDA has a cyber security team that works to ensure information is safe as we enter systems into the cloud. He also told the Board GRDA does have a new information security officer that is tasked with keeping tabs on all of that infrastructure and working with the team to make certain data is protected.

4. New Business

4.f. Capital Work Order Report (* Denotes Addenda Items)

Number	Title	Gross Work Order Amount	Reimbursement	Net GRDA Cost
RF 018-00932	Salina Generator Rotor Pole Replacement	\$ 2,858,400	\$ -	\$ 2,858,400
RF 018-00940	Tahlequah Interconnect Upgrade	2,399,300	-	2,399,300
RF 018-00941	Armin Road Distribution Line	440,900	-	440,900
RF 018-00942	PACS Server and Redundancy Project	86,400	-	86,400
Grand Total Work Orders		\$ 5,785,000	\$ -	\$ 5,785,000

Mr. Sullivan said that after some discussion last month with the Audit Committee in preparing the budget there was a request the staff take a different approach to how they handle capital work orders. He stated he would like to have any feedback or questions from the Board on the full report they were provided or the summary of items on the agenda. He noted multi-year projects.

Director Vandevier said he did not believe the Armin Road Distribution Line item was originally included in the list of projects he saw. He asked Mr. Sullivan for a little detail on this. Mr. Sullivan said this is a request from the MidAmerica Industrial Park because they are trying to pre-build some areas in the park and lay out some

minimal infrastructure to encourage potential projects when prospective companies come to look. The park can show this infrastructure is in place and GRDA can quickly move to extend service to any new industries. Mr. Sullivan said he and the staff are aware that this item would be taken out of the overall budget, and could likely push another project back a bit. Director Vandevier asked if this will provide any near term opportunity for GRDA or if this is a long-term opportunity. Mr. Sullivan this is probably a mixture of the two. He explained it will depend on how quickly new businesses come in. Mr. Brown also added this is not only for future load, but GRDA will actually need the substation now to accommodate a key customer in the park already.

Director Vandevier said he did not see the PACS Server and Redundancy Project item in the capital budget. Mr. Wall stated it is on the list of capital projects and is within budget. He said it does a technology refresh on 3 of GRDA's PACS servers that run the physical security system, and 3 are to implement a redundancy factor to ensure there is a better redundancy posture. Director Vandevier asked if this is a requirement or only best practice. Mr. Wall said it is a best practice for the servers GRDA currently has.

Director Churchwell moved to approve the capital work orders as presented, seconded by Director Vandevier, and voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.g. Resolution of Support - Formation of Northeast Oklahoma Regional Advanced Manufacturing & Materials R&D Task Force

Mr. Sullivan stated Mr. Tom Gray put GRDA in touch with Mr. Paul Mason that is working with others in the Northeast Oklahoma area to get funding from the U.S. Department of Commerce on advanced manufacturing. He said one of the key areas being looked at in the MidAmerica Industrial Park is advanced manufacturing companies and development of workforce. Mr. Sullivan explained GRDA would like to

create this resolution to lend support to their effort to make this application for the program.

Chairman Kimball asked if this was a no cost item to GRDA. Mr. Sullivan confirmed this. Chairman Kimball stated he understood there is no cost in the future as well, and said Mr. Mason has been very successful in this. Mr. Sullivan said GRDA foresees some real benefit to this program being in place.

Director Lewandowski moved to adopt the resolution as presented, seconded by Director Richie, and voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.h. Proposed Cooperative Program – U.S. Geological Survey – Surface Water Operation, Maintenance and Water-Quality Sampling of Gaging Stations in the Illinois, Neosho, Spring and Elk River Basins

Mr. Fite provided a program description, saying the proposed program is for the collection of streamflow data and the collection and analysis of periodic water quality data at locations in the Illinois, Neosho, Spring and Elk River Basins. He said GRDA must rely upon a third party water quality sampling program to defend their position as an agency on water quality and to allow it to discern what is happening upstream states. Mr. Fite stated surface-water data collection consists of collecting continuous records of river stage, maintenance of a stage-discharge relation, and publication of mean-daily river discharges annually. All continuous monitor values for surface-water are available through real-time satellite telemetry on the U.S. Geological Survey (USGS) Web site. Periodic water-quality samples covered in this agreement are for six event samples and for six base flow samples of field parameters; temperature, specific conductance, pH, and D.O.; nutrients consisting of ammonia, ammonia plus organic nitrogen, nitrite, organic nitrogen, orthophosphate, total nitrogen, suspended sediment concentration, suspended sediment sieve diameter percent less than 0.063 mm; and turbidity. Mr. Fite

said in 2018 GRDA added new stream gaging sites on the Neosho, Spring and Elk Rivers. He stated a webcam and a stage-only stream gage was also located on the Illinois River, near Moody's. Mr. Fite explained this information gives the public an idea of what conditions are before they come to the river for recreation.

Director Vandevier asked where on the Neosho, Spring and Elk River Basins these monitors are located. Mr. Fite said GRDA has located these monitors as close to the state line as possible. He also said, generally, they are on a bridge crossing.

Director Vandevier asked how long the monitors have been in place. Mr. Fite explained the Tahlequah gage site has been there 83 years. He said the others have all been there under 63 years. Mr. Fite stressed the importance GRDA maintain a long-term water quality record given the ever-increasing population and associated urban sprawl throughout those watersheds within GRDA Jurisdiction.

Director Lewandowski asked if there is any other water quality monitoring being done on the Scenic Rivers. Mr. Fite confirmed this and said it is extensive. He also reported on the new water quality lab that GRDA has established on the campus of Northeastern State University (NSU) - Tahlequah. He also said Dr. Townsend has a continual effort going on in his lab as well at the GRDA Ecosystems & Education Center. Dr. Townsend stated there has been a lot of work on the Illinois River and the staff is trying to focus on, through the NSU partnership, on the Scenic Rivers. Mr. Fite said out of 82 watershed basins in the state, the Illinois River is the most armored by stream gaging stations/water quality monitoring. He stated that he is trying to bring this type of focus and extensive sampling to the other water resources in GRDA's jurisdiction.

Director Vandevier said he assumes with all of this data it would be possible to get to a predictive analysis type approach. Dr. Townsend said the staff is wrapping this work up now. He explained several years ago GRDA entered into a partnership with the

Oklahoma Department of Environmental Quality (ODEQ) and has done a comprehensive modeling for the Spring and Neosho Rivers. It is going to lay out target areas primarily associated with nutrient inputs which will give GRDA a foundation baseline to begin working on target areas for active management, and how to address those going forward. Dr. Townsend said GRDA is almost at the point of being able to develop management plans to do this.

Director Lewandowski asked if the bordering states are collecting data as well. Dr. Townsend confirmed this, and said GRDA is currently working with the Kansas Department of Health and Environment as well as working with Missouri and Arkansas Departments of Agriculture.

Mr. Fite showed a breakdown of the funding required for the project, with GRDA's share being \$147,700 of the total cost of \$292,350 program. He said additional funding is provided by the U.S. Army Corps of Engineers-Tulsa District, and the USGS National Streamflow Information Program in support of the Illinois River Basin data collection program. Related to the Elk River Gage Site, he noted the reduced cost for that site as USGS- Missouri District Water Center already collects monthly base flow samples at Tiff City stream gage.

Chairman Kimball said the state should be extremely proud to have Ed Fite with GRDA with his vast knowledge and the information he brings to GRDA to share and assist with activity around the other GRDA water resources. He commented there is nothing much more important than this for GRDA, and thanked Mr. Fite.

Director Churchwell moved to approve the U.S. Geological Survey (USGS) Joint Funding Agreement # 18C4SH003100000 for the project of Surface Water Operation, Maintenance and Water-Quality Sampling of Gaging Stations in the Illinois, Neosho, Spring and Elk River Basins during the period January 1, 2019 through December 31, 2019, in the amount of \$147,700, seconded by Director Richie, and voted upon as

follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.i. U.S. Geological Survey Bathymetric Survey and Area Capacity Table for Grand Lake O' the Cherokees

Dr. Townsend said this item is related to previous discussions on relicensing and what came out of the Federal Energy Regulatory Commission's (FERC) Study Plan Determination. The requirement to acquire the bathymetry report was a bit unexpected. He stated the staff felt like the data needed to move forward was provided, but FERC was convinced by other parties that GRDA needed to provide some additional information. Dr. Townsend said the commission suggested this report for Grand Lake to provide information specifically for the license application. He explained this will set GRDA back in the process, which was initially 5 years. It will add approximately 4 years. Dr. Townsend said it is essentially a 2-year project for U.S. Geological Survey to complete as Grand Lake is a significant sized resource, and grossly underestimated both in scope and cost by FERC. He stated the last bathymetry report was in 2009 and used single beam technology and was performed by the Oklahoma Water Resources Board. GRDA will now be utilizing a multi-beam technology. He showed a diagram to illustrate the difference in the technologies, and said before the modeling can be completed this baseline information will be needed.

Director Churchwell asked if this would tell us anything about sedimentation. Dr. Townsend said there is a second component of the relicensing that will address sedimentation, and FERC has made this a part of the Study Plan Determination.

Director Vandevier asked if there is value beyond the relicensing process to this, and possibility could GRDA recover some of this cost. Chairman Kimball said he assumes this will be very accurate and worth something to many people around the lake or that visit the lake. Dr. Townsend confirmed this and said this will be more

accurate and valuable to many. He also said there could be potential to monetize this. Mr. Sullivan agreed that GRDA will want to investigate this further.

Director Richie asked if this is all done at a consistent lake level. Dr. Townsend confirmed this, but said it does not have to be and the reporting would be adjusted for the level.

Director Elam asked if there would be an opportunity to use this to GRDA's advantage from an operational standpoint. Dr. Townsend confirmed this and said this would be utilized as the foundation for the modeling work.

Director Lewandowski asked if GRDA will own the data. Dr. Townsend confirmed this.

Director Churchwell moved to approve an interagency agreement between GRDA and USGS for an amount not to exceed \$426,000 for multi-beam bathymetric mapping of Grand Lake, subject to final approval by the CEO and General Counsel, seconded by Director Richie, and voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.j. Fleet Monitoring and Tracking System – RFP 42465

Mr. Herron said this project is needed to reduce unscheduled vehicle downtime through automated remote diagnostics, achieve “just-in-time” vehicle maintenance, protect vehicle engines with remote diagnostics, and reduce fuel expenses caused by excessive engine idling and low fuel economy. These will save money over time on unnecessary maintenance and provide alerts when a vehicle needs emergency servicing and information on speeding. He stated that the hope is to also reduce risk to employees in accidents by identifying aggressive drivers and speeders to allow behavior modification before an accident occurs. It will also reduce liability exposure in insurance claims, simplify fleet management oversight through online availability,

manage the fleet from anywhere, saving time and improving efficiency, and will provide a more automated transfer of data to other management programs such as the ERP. Mr. Herron explained there are a number of employees that work by themselves, and this system would provide lone worker safety improvements by allowing accurate geolocation of employee worksites in case of emergencies or accidents. He showed a breakdown of what idling costs are according to AAA, and said the fleet currently on the operational side would be for 55 sedans or small SUV's, 179 half-ton to 1-ton trucks, and 43 heavy vehicles. These numbers exclude GRDA Police vehicles. Mr. Herron stated GRDA staff received input from a State contractor for a similar system and learned a lot from that contractor regarding system capabilities. He said GRDA staff did Web research and found other possible systems. Ultimately, deciding to put this project out for competitive bid and an Request for Proposal (RFP) was prepared with input from several affected departments. The main system goals were to identify and track each vehicle while in use in real time, identify the individual driver operating the vehicle, maintain and display individual vehicle records for location and speed, track vehicle status and driver operational data. The original plan was to include additional diagnostic information only on heavy equipment, to include engine operating conditions, engine alarms and warning indications, and PTO operation. This bid would require computer programs for monitoring the system, installation services, training of GRDA mechanics for future installation and removal, training of GRDA personnel in the use of the monitoring system program, and quotes for purchase or rental on the first year, with 2 one-year renewal options. Mr. Herron stated GRDA staff opened responses on November 14, 2018, with 5 responses received and evaluated. Only 2 respondents were non-conforming in required documentation and 1 additional respondent had technical areas of non-compliance and was removed from further evaluation. The remaining 2 bidders were requested to provide demonstrations of their products during

early December 2018. Based on the demonstration and lower cost, he explained GRDA staff chose LB Technologies. Based on the evaluation, the staff decided to use 2-minute reporting, get full diagnostics package on all GRDA vehicles, require driver identifiers only on passenger pool vehicles, and attempt to use swipe cards rather than key FOB's if available from the vendor at similar costs. After further investigation, Mr. Herron said the staff learned from our physical security staff that the information on the swipe cards GRDA has is proprietary and would not be able to be used for this purpose. He provided a cost summary of the LB Technologies quote for the system. LB Technologies quoted \$54,385.56 for the first year, \$52,974.94 for the second year and \$52,974.94 for the third year. In contrast to this, the organization used by the State quoted approximately \$100,000 for the first year, and approximately \$75,000 for the second and third year. Mr. Herron said there is no direct funding included in the 2019 budget, but the system will be funded through anticipated savings in reduced fuel use, better control of trip mileage, reduced maintenance, more crew productivity, evidence when a vehicle is involved in an accident, a savings in time in completing paper mileage forms and manual data entry, and trip documentation. To clarify, Mr. Herron said this system tracks real time data and will be coming in continuously, but only records the data on a 2-minute basis.

Chairman Kimball asked if this has the possibility to reduce the number in GRDA's fleet. Mr. Sullivan said that is actually a separate issue that the staff is working on right now as they finalize the new vehicle policy. He also stated GRDA is changing the criteria on how vehicles are assigned.

Director Elam asked if this was the entire fleet we are discussing. Mr. Herron said it is all of our fleet, with the exception of the GRDA Police vehicles because they already have a system similar to this in place, and have had it for some time. Mr. Edwards commented it is like others that local law enforcement have in this part of the state.

Chairman Kimball asked who would be monitoring this data and would it take additional personnel. Mr. Herron said it is set up so that each department supervisor can login and monitor their own crew vehicles, and GRDA's Fleet Department will also get notifications, etc. He confirmed there will not be any personnel added. Chairman Kimball asked if there is the possibility to share this contract with some of the customer cities or would it be just as economical for them to handle this on their own. Mr. Herron said he did not have an answer for that, but it would be up to this contractor if they agreed to offer and guarantee the same rates. Chairman Kimball asked what happens if it doesn't pay for itself. Mr. Herron said if there is doubt then this project would need to be postponed as more research is done and approval might not be needed right now.

Director Elam asked Mr. Herron if he believes this system will save GRDA enough to pay for itself. Mr. Herron confirmed this.

Director Vandevier shared his personal experience with systems like this when he worked with a very large corporation, with hundreds of vehicles. He said the system they employed was similar to this and the biggest challenge was the culture change they experienced at the company. Director Vandevier stated there could be some Human Resources policy issues GRDA needs to think about, as well as some discipline issues to think about tied to this, and that is the biggest challenge. He commented that once you get through all of this, it becomes more accepted.

Chairman Kimball asked if the ERP fleet module would replace this system. Mrs. Gudde said the ERP includes this. Mr. Herron explained GRDA would be provided a file that will be handed off to the ERP and there could be a cost to integrate this data. Mr. Brown stated this is just an option and we will only pursue that if we are convinced that the cost savings would provide a benefit.

Director Richie asked Director Vandevier if he felt the vehicle tracking system used at his previous company saved them money. Director Vandevier said it absolutely did. He also said he is sold on these types of systems for fleet management.

Director Vandevier asked if GRDA is committed to the 3 years, or is there an opportunity to make a change should there be an issue. Mr. Herron stated it is a 12-month commitment and would have to be renewed by the Board of Directors each year. This approval would only lock down the cost for the 3 years.

Director Churchwell said his personal experience with systems like this is the same as Director Vandevier's. He stated that overcoming the cultural aspect of it was the far more difficult part. Once that is overcome, Director Churchwell stated the system really does pay for itself.

Director Kimball said his experience was the same as the other directors, and commented there would likely be more cultural issues than anticipated. He stated it is very important for the Human Resources policies to be in place to handle this. Mr. Sullivan commented that this information will be available to our system operators and anyone with a need to monitor the activity.

Director Churchwell moved the Board approve award of RFP #42465 – Fleet Monitoring and Tracking System, to the low evaluated bidder, LB Technologies, for the first year rental cost of \$54,385.56 with the option to extend the agreement for 2 more years based on the quoted per-unit rates, seconded by Director Elam, and voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

Director Churchwell and Chairman Kimball left the room at 11:24am, and both returned at 11:29am.

4.k. Second Reading and Modification of Board of Directors' Policy No. 2-3

Mr. Lofton explained this item is regarding Board of Directors' committees. He said this is the final reading and consideration for approval of this policy to amend the policy and update the Assets Committee responsibilities to include Scenic Rivers rules, to amend the Audit, Finance, Budget, Policy & Compliance Committee responsibilities to place emphasis on the committee's oversight concerning financial reporting and regulatory policies, and to tailor the responsibilities of the Compensation and Marketing Committee, making it clear the committee oversees compensation for the Chief Executive Officer. This will also eliminate the Power Capacity and Utilization Subcommittee and the Compliance Ad Hoc Committee.

Director Churchwell moved to approve the modification to the Board of Directors' Policy No. 2–3 as presented, seconded by Director Lewandowski, and voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

4.l. Other New Business

There was no other new business.

5. Reports

5.a. Board of Directors Committee Reports

- 1. Assets Committee:** Director Churchwell had no report.
 - a) Consideration, Discussion, and Possible Approval of an Assignment of a License to Encroach from John W. and Sherry L. Bouman to Roy G. Jalbert for Property Located in Ottawa County, Oklahoma.**
 - b) Consideration and Discussion Regarding the Status of Habitable Structures.**

Regarding item a, Director Churchwell said the committee reviewed the assignment of a license to encroach from John W. and Sherry L. Bouman to Roy G. Jalbert for this property. The committee agreed that this be assigned to the new owner of this property. The yearly value would be \$215.50.

Director Churchwell moved the Board approve the Assignment of the 30 year License to Encroach from John and Sherry Bouman to Roy Jalbert in Ottawa County, Oklahoma, for the amount of \$215.50 per year, and it was voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0-no, 0-abstained).*

Regarding item b, Director Churchwell said the committee received an update on the status of habitable structures on GRDA waters and what it will take to move the recommended program forward. There will be more review on this in the future.

- 2. Audit, Finance, Budget, Policy & Compliance Committee:** Director Vandevier had no report.
 - a) Compliance Committee: Director Vandevier had no report.
- 3. Compensation & Marketing Committee:** Director Kimball had no report.
 - a) Power Capacity Utilization Subcommittee: Director Kimball had no report.
- 4. Fuel and Long-Range Planning Committee:** Director Meyers was absent, but Director Churchwell said there is a committee conference call scheduled for January 18, 2019.

6. Executive Session:

- a. **Proposed Executive Session Pursuant to 25 O.S. §307(B)(4) for the Purpose of Confidential Communications between GRDA and its Attorneys Concerning a Pending Claim Against Nooter–Eriksen, Disclosure of Which Will Impair the Ability of GRDA to Process the Claim.**
- b. **Proposed Executive Session Pursuant to 25 O.S. § 307(B)(4) for the Purpose of Confidential Communications Between GRDA and Its Attorneys Concerning the Pending Investigation, Claim, or Action, related to Federal Energy Regulatory Commission Project No. 1494-348, Which GRDA has**

Determined, with the Advice of Its Attorneys, that Disclosure of Such Communication Would Seriously Impair the Ability of the GRDA to Process the Pending Investigation, Claim, or Action in the Public Interest.

- c. Proposed Executive Session Pursuant to 25 O.S. § 307(B)(4) for the Purpose of Confidential Communications Between GRDA and Its Attorneys Concerning the Pending Claim Related to Enel Green Power North America Which GRDA has Determined, with the Advice of Its Attorneys, that Disclosure of Such Communication Would Seriously Impair the Ability of the GRDA to Process the Pending Claim in the Public Interest.**

Director Churchwell moved to go into executive session at 11.47 a.m., seconded by Director Richie, and voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0 no, 0-abstained).*

Director Elam moved to return to regular session at 12:37 p.m., seconded by Director Richie, and voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0 no, 0 abstained).*

7. Action on Executive Session Items

- a. Action, as Necessary, Concerning a Pending Claim Against Nooter-Eriksen.**
- b. Action, as Necessary, Concerning the Pending Investigation, Claim, or Action, related to Federal Energy Regulatory Commission Project No. 1494-348.**
- c. Action, as Necessary, Concerning the Pending Claim Related to Enel Green Power North America.**

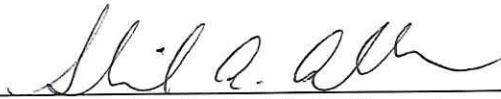
Regarding item a, Director Churchwell moved to proceed as discussed in Executive Session, seconded by Director Richie, and voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0 no, 0-abstained).*

Regarding item b, no action was needed on this item.

Regarding item c, Director Elam moved to proceed as discussed in Executive Session, seconded by Director Richie, and voted upon as follows: Churchwell, Elam,

Kimball, Lewandowski, Richie, Vandevier, yes. *Motion passed (6-yes, 0 no, 0-
abstained).*

Director Richie moved for adjournment at 12:46 p.m., seconded by Director Elam,
and voted upon as follows: Churchwell, Elam, Kimball, Lewandowski, Richie,
Vandevier, yes. *Motion passed (6-yes, 0 no, 0 abstained).*



Sheila A. Allen, Secretary

DATE APPROVED:

February 13, 2019
GRDA Board of Directors