

**Board Of Water Works**  
**REGULAR CALLED MEETING MINUTES**  
**May 21, 2019**

**Board Members Present:**

Mr. Creighton Mershon, Chair  
Dr. Sharon Kerrick, Vice Chair  
Mr. Paul Esselman  
Dr. Sundeep "Sunny" Dronawat  
Ms. Tierra Kavanaugh Wayne  
Mr. Craig Willman

**Not Present:**

Mayor Greg Fischer

**Others Present:**

Mr. Spencer Bruce, President and Chief Executive Officer  
Mr. Daniel Frockt, CFO, Louisville / Jefferson County Metro Government  
Mr. Dave Vogel, Executive Vice President, Customer Service and Distribution Operations  
Ms. Kelley Dearing Smith, Vice President, Communications and Marketing  
Dr. Tom Lockett, Vice President, Information Technology and Chief Information Officer  
Ms. Lynn Pearson, Vice President and Treasurer  
Mr. Terrence Spence, Vice President, Human Resources and Labor Relations  
Mr. Michael Tighe, Vice President, General Counsel and Corporate Secretary  
Ms. Kim Reed, Chief Innovation Officer, One Water  
Mr. Kevin Kastensmidt, Director, Information Technology  
Ms. Jenni Schelling, Director, Internal Audit  
Dr. Rengao Song, Director, Water Quality and Research  
Mr. Jeremy Raney, Manager, Infrastructure Planning  
Mr. Matthew Griffith, Strategic Planning and Performance Specialist  
Ms. MarySusan Abell, Manager, Communications and Marketing  
Ms. Channa Newman, Manager, Education and Outreach  
Ms. Beverly Soice, Paralegal

**Visitors:**

Ms. Peggy Noe Stevens, PNSA  
Ms. Margaret Horlander, PNSA  
Ms. Mary Stone, PNSA

The regular called meeting of the Board of Water Works (BOWW) was held on Tuesday, May 21, 2019 at the Louisville Water Company (Louisville Water or the Company) located at 550 South Third Street, Louisville, Kentucky. Chair Creighton Mershon called the meeting to order at 11:02 a.m.

**Minutes of the Previous Regular BOWW Meeting Approved**

Tierra Kavanaugh Wayne moved to approve the Annual and Regular Called Meeting Minutes of April 16, 2019, seconded by Dr. Sunny Dronawat and the motion unanimously carried.

## **Report Provided by the President/Chief Executive Office**

Spencer Bruce noted that at the April Board meeting staff provided an update on pure spout™, our filter that can help communities across the country reduce lead exposure in public facilities. Mr. Bruce provided the following overview of two other initiatives the Company is working to implement.

With the implementation of the new CC&B system, the Company has the capability to provide billing services for other utilities or businesses. Louisville Water currently bills for MSD and a handful of other regional wastewater facilities. Before expanding this offering to a broader market, leadership recognized the need for a thorough review of the business opportunity and enlisted the expertise of a leading billing consultancy firm to assist with an internal assessment, market and financial analyses, and the development of an operational model. Now that the One Water Chief Innovation Officer is on board, Louisville Water can move forward with the final phase of the project, which will provide the necessary information to fully understand the feasibility of the opportunity and chart a path forward.

Louisville Water has extensive knowledge in the water industry. Historically, we have used our expertise to assist wholesale customers in meeting the continuing financial, engineering and water quality challenges. However, while we will continue to provide this support to our wholesale clients, we have realized there is demand for these unique capabilities beyond our current service territory. Over the past two years, we have tested this model by working directly with other water utilities to provide consulting services. Now, we plan to explore opportunities to expand these efforts.

Mr. Bruce advised that he recently met with the Board Chair and Vice Chair to review his 2019 annual goals. He also stated he has met with all but one of the newly elected metro council members.

## **Facilities Safety Improvement Proposal**

Mr. Bruce and Michael Tigue reviewed events of last Thursday's shooting at Louisville Water's corporate office building and the steps being taken to provide additional security to the Company and its employees.

## **Budget Increase Approved for Project No. 3999-444-0001: IT Oracle Unlimited License Agreement**

Kevin Kastensmidt advised that Oracle software is the foundation for many of our database and applications and are used with all major systems including Customer Care and Billing (CC&B), Work and Asset Management (WAM), Geographic Information Systems (GIS), PeopleSoft HR, Finance e-Business Suite (EBS), Laboratory Information Management System (LIMS), and more.

Included in the proposed 2019 IT – Oracle Unlimited License Agreement (ULA) budget are funds for increasing Disaster Recovery capabilities, adding for system growth, and providing the capability to install Oracle technical software on virtualized servers on-premise and in the Oracle Cloud. An initial ULA was purchased in 2017 and expires on May 31, 2019.

This is a new agreement to continue the migration of Oracle based applications to run in virtualized environments and the Oracle Cloud which have additional licensing requirements. This will also aid in the preparation for additional systems to support billing services or other endeavors. To develop the ULA, Louisville Water and Oracle agreed upon a list of products to include in the agreement. Current deployed license counts are provided with estimates of future growth. Oracle then analyzed

this information and provided a cost. Licenses include Database, associated management packs, Advanced Security, Data Masking, Audit Vault, Golden Gate, WebLogic, WebCenter, SOA, E-Business Suite Adapter, Oracle Data Integrator, and upgraded Identity Management suite.

Mr. Kastensmidt advised this agreement does not include all of Louisville Water's Oracle licenses. Licensing of the included products is based upon the physical server processors that run each component. Many of our licenses are not based on hardware. They are based upon customer or employee counts and those type licenses are not included in the ULA. The products identified for the ULA are the licenses most impacted by hardware changes and have the highest rate of change.

Mr. Kastensmidt stated the overall cost of the two-year ULA is \$3,537,461.86. He reviewed each component of the total cost which includes Capital New program Fees, Support Fees for New Licenses, Technical Support Fees for Converted Licenses and Back Support Fees. He noted the list price of the included licenses plus support is over \$8,000,000.

This purchase was intended to be presented at the April 2019 BOWW meeting which included higher fees. However, after two rounds of negotiations with Oracle, we were able to reduce the capital cost by \$250,000 and annual operating costs by \$50,000. We were also able to add the capability to extend our on-premise licenses to be used in the Oracle Cloud, which provides another layer of savings, at no additional cost.

The original budgeted amount was \$1.7M for the capital expense based upon the original ULA in 2017. When planning for the renewal, several additional products were added including the Oracle Data Integrator used for WAM and other associated licenses that are hardware-based licenses. This increased the budget \$676,530 over the two-year term. The associated capital project was also impacted. In error, the budgeted capital cost was spread across 2019 and 2020 believing the capital costs would be invoiced quarterly like maintenance. That was incorrect as the capital component is invoiced in full amount up front. A change action was completed to move all capital funds to 2019 and increase the budget. Change actions on other IT projects were also completed to move budgeted 2019 amounts to 2020 to help reduce the impact of the ULA change.

After a thorough discussion, Craig Willman moved to approve the increase of the budget for project 3999-444-0001 IT Oracle Unlimited License Agreement from \$1,700,000 to \$2,125,315.00 and the purchase of a two-year Oracle Unlimited License Agreement in the amount of \$3,537,461.86. Paul Esselman seconded and the motion unanimously carried.

### **Scope and Budget Increased for Project No. 15255: Condition 2018 – PCCP**

Jeremy Raney advised the 2018 Condition Assessment Project was initiated to perform electromagnetic condition assessment on 13.05 miles of the 107 miles of 24", 30", 36", and 48" prestressed concrete cylinder pipe (PCCP) in Louisville Water's service area.

The condition assessment contractor, Pure Technologies, completed the inspection of the scheduled mains in late 2018. Louisville Water's historical damaged PCCP pipe section rate is approximately 0.40%. This value was used in estimating the number of repairs (17) and the project budget for the 2018 Condition Assessment Project. Upon review of the reporting received in September 2018, a total of 167 pipe sections were identified as being damaged. After a thorough review, the determination was made to replace and/or rehabilitate 30 of those pipe sections deemed to be most at risk with the remaining to be monitored and re-evaluated during the next inspection cycle (budgeted to begin in 2020).

As the number of repairs and/or replacements is significantly higher than anticipated, an increase in the project budget is recommended at this time.

Mr. Esselman moved to increase the project scope to include the items identified above, and to increase the budget of record for the Condition 2018-P.C.C.P. to \$10,827,669.88. Dr. Dronawat seconded and the motion unanimously carried.

### **Unbudgeted Project No. 342-19-0017: MRRP 2019 – E. Manslick Road Approved**

Mr. Raney presented the following unbudgeted project to the Board for approval to include it in the 2019 Capital Improvement Plan (CIP).

The original 2019 Main Replacement and Rehabilitation Programs (MRRP) budget was \$29.7 million with \$10.8 million being allocated for new projects, including 24,560 feet of main replacement. While the current main replacement selection method is proving to reduce main break frequency, unexpected and accelerated degradation in the water main on E. Manslick Road makes it a good candidate for inclusion in the 2019 CIP.

The Net Present Value (NPV) analysis that is utilized to evaluate projects compares individual break and leak maintenance costs with the NPV of the capital costs to analyze or rehabilitate the asset. Infrastructure Planning performed the NPV analysis on the E. Manslick Road water line on July 2, 2018 which yielded a value of 0.49. Anything that is less than a value of 1.0 is not considered justified for replacement. Since that time, this main has broken on nine separate occurrences. The result is that the net present value has risen sharply to over 3.90 as of March 5, 2019, adequately justifying proceeding with replacement.

The scope of this project includes the installation of 1,250 feet of 8-inch and 6,900 feet of 12-inch Ductile Iron Water Main on E. Manslick Road between Shepherdsville Road and Smyrna Parkway. The existing main is a 1965 vintage 8-inch Cement Lined Delavaud Cast Iron main. A portion of this main is being upsized to a 12-inch Ductile Iron Main to accommodate the high pressures of the Smyrna Booster Pump Station feeding this portion of the pressure zone. This will allow redundancy and increased volume of water to be distributed throughout the expanded zone.

The project cost estimate of \$3,815,000 includes design, bidding and initiation of construction in 2019 with an estimated Cash Flow of \$310,000 in 2019, with construction completion in 2020.

Dr. Sharon Kerrick inquired where the funds to pay for this project will come from. Mr. Raney explained some funds will come from other projects that will be releasing contingency funds. Additionally, other projects will be reprioritized and/or rescheduled for 2020.

Dr. Kerrick moved to add the unbudgeted E. Manslick Road MRRP Project to the 2019 CIP and to establish a budget of record of \$3,815,000 for this project. Seconded by Ms. Wayne the motion unanimously carried.

### **Contract Awarded for Oracle Remote Application Management Support**

Dr. Tom Lockett provided the following in support of his request to enter into an agreement with Oracle America, Inc. (Oracle) to provide support for the Oracle application suite of software that Louisville Water uses to support various functions within the Company.

Oracle applications are divided into two categories. The Enterprise Business Suite (EBS) includes applications that support functions such as accounting, purchasing, accounts payable, inventory management, cash management, and project costing. The Utilities Suite includes applications that support functions such as Customer Care & Billing, Mobile Workforce Management, and Work and Asset Management.

Louisville Water employs very few people who have the skills to support these applications from a technical perspective. As these applications are deployed deeper into the organization, they become business-critical and severely degrade Louisville Water's ability to perform its business functions when they are not available for use.

In order to staff the Information Technology (IT) department with the needed resources, the addition of seven employees would be required, based on benchmarking Cincinnati Water, Las Vegas Water, and Denver Water. Analysis conducted in 2017 estimated that the fully-loaded cost of a qualified technical resource would be approximately \$175,000 per year. Seven additional technical resources would cost approximately \$1,225,000 per year. These resources are difficult for small companies to attract and retain. The last individual hired by Louisville Water took a year to recruit and relocate to Louisville.

The initial estimate from Oracle to provide this support was \$1,535,000 per year. A Request for Proposal (RFP) was issued and nine proposals were received. Four rounds of evaluation were performed by the evaluation team. It was difficult to find vendors capable of providing support for all of the Oracle modules used by Louisville Water. Some vendors' proposals included subsets of the needed modules. Some proposed partnering with multiple other vendors to provide support. The decision was made to further negotiate with Oracle due to the breadth of support that they could provide. The estimate from the RFP was for \$1,226,199.57 annually (\$3,678,598.71 for three years). After additional negotiations, the final estimated amount for three years is \$3,232,584.79. The prorated amount for 2019 is budgeted.

Dr. Dronawat moved to award a three-year contract for Oracle Remote Application Management Support to Oracle in the amount of \$3,232,584.79. Seconded by Mr. Esselman and the motion unanimously carried.

### **Increase Approved for Louisville Water Tower Park Rates**

Kelley Dearing Smith provide a summary of the history of the Louisville Water Tower. She then introduced Peggy Noe Stevens. Ms. Stevens advised she has been asked to review the 2014 – 2018 operations and, based on those finds, to provide future scenarios. Ms. Stevens reviewed her findings with the Board and provide a summary of recommendations which include developing key performance indicators for attendance, revenue and expense, earned media, brand-building and sales and marketing; allocate a sales and marketing budget; and explore outdoor beverage service with our current caterer.

Ms. Stevens reviewed options that could be implemented now to increase cash flow which was increasing the admission fees and rental fees.

Ms. Dearing Smith requested approval to amend Louisville Water's 2019 Tariff to:

- Increase field trip admissions to WaterWorks Museum to \$5

- Increase "peak" weekday, indoor rentals at Louisville Water Tower Park to \$400

- Increase "peak" weekend, indoor rentals at Louisville Water Tower Park (Friday evening, Saturday and Sunday) to \$2,500

Ms. Wayne moved to approve increasing the rates as requested for the Louisville Water Tower, seconded by Mr. Esselman and the motion unanimously carried.

Ms. Dearing Smith advised the Board will receive an update in the 4th quarter of 2019.

### **Water Quality**

Dr. Rengao Song provided a brief history of Louisville Water's water quality and treatment challenges over the years. These challenges include conventional water treatment, extreme river conditions that causes high turbidity and TOC, various types of spills, pesticides and herbicides, algae-related clogging, taste and odor, toxins and nitrification and disinfectant residual management.

Dr. Song also discussed Contaminants-of-Emerging-Concern (CECs) including Perfluoroalkyl substances (PFAS) and Louisville Water's strategy concerning these contaminants.

### **Compensation & Benefits Committee Report Given**

The minutes of a Compensation & Benefits Committee meeting held on April 11, 2019 have been included for records purposes only. The minutes were discussed at the April 16, 2019 BOWW meeting.

### **Audit Committee Report Given**

Jenni Schelling provided a summary of the items discussed at the April 23, 2019 meeting of the BOWW Audit Committee.

### **Financial Report Given**

Lynn Pearson stated that completion of the financial statements for December and full year 2018 has been on hold pending the release of final audited pension and post-retirement benefits balances by the state. The final audited report has now been received and we are in the process of working with our external audit team to finalize our 2018 audited financial statements.

Total consumption and water revenue for April 2019 came in higher than budget. Total operating expenses and non-operating income also performed favorably to budget. These favorable budget variances were only partially offset by unfavorable variances in other operating revenue and non-operating expense. As a result, net income for the month is \$526,000 more than budgeted.

Consumption of 2.3 billion gallons for April 2019 is 35.9 million gallons higher than budget but is 23 million gallons lower than April 2018. All customer classes are over budget in April with the exception of industrial and wholesale. April's favorable budget variance is a result of the reversal of a timing difference from March. Year-to-date consumption remains under budget and prior year, by 3.7% and 6.8% respectively, with residential, commercial and industrial customer classes driving the unfavorable budget variance.

Water Revenue for April 2019 is \$282,000 higher than budget and \$588,000 above prior year. Water revenue through April is under budget by \$1.7 million and is \$181,000 below last year. Lower consumption is a key factor driving decreased water revenue for the year-to-date period as compared to both budget and prior year levels.

Other Operating Revenue for April is \$44,000 lower than budget and \$5,500 higher than year-ago levels. Through April, other operating revenue is under budget by \$130,000 but exceeds prior year by \$330,000. The year-to-date variance to budget is primarily attributable to late fees, disconnect fees and service line protection revenue coming in lower than expected, partially offset by favorable variances in profit on sale of materials and revenue from contract operations. The favorable year-to-date variance to prior year is driven by higher cross connection and service line protection revenue.

Operating and Maintenance Expenses for April of \$6.4 million are \$415,000 lower than budget and \$65,000 higher than April 2018. The April variance to budget is primarily in labor and labor related, utilities, materials and supplies and contractual services costs. April year-to-date operating and maintenance expenses are \$1.6 million under budget and \$218,000 lower than year-ago levels. The majority of the year-to-date favorable budget variance is in labor and labor related expenses, utilities, chemicals, materials and supplies, contractual services and bad debt expense. Materials and supplies and contractual services are lower partially due to the timing of purchases.

Total Operating Expenses for April of \$11.5 million are \$294,000 lower than budget and \$172,000 more than April 2018. The favorable budget variance for the month is primarily due to lower operating and maintenance expense. Total year-to-date operating expenses are lower than budget by 3.7% and higher than prior year by 1.5%. The year-to-date budget variance is mainly due to lower operating and maintenance expense and loss on disposition of property. The year-to-date variance vs. prior year is primarily due to higher depreciation.

Non-Operating Income through April is \$430,000, which is \$13,000 higher than budget and \$189,000 less than the same period in 2018. The variance to budget is due to a slightly higher interest rate earned on funds than anticipated. The variance to prior year is due to a lower dollar amount invested as we continue to spend down cash on the capital program and move towards a bond issuance later in the year.

### **Communications and Marketing Report Given**

Ms. Dearing Smith provided a summary of the communications and marketing report for April.

The Kentucky Derby Festival is Louisville Water's largest partner for the Louisville pure tap® program. We are part of six festival events, the largest being the set-up and coordination for the festival's 15 water stops along the mini and marathon routes. (One of the stops is at our corporate office). We also served pure tap at the Runner's Expo, Tour de Lou bike event, Wine Fest and Beer Fest, and even made sure the horses during the parade had access to water.

Our work with the festival is a year-round effort that includes logistics, coordinated messaging, water quality checks and staffing. The Louisville pure tap® program reaches nearly one million people annually and not only is the Kentucky Derby Festival the largest recipient, it's also one of the oldest partners. We've worked with the festival for over 20 years.

Louisville Water has partnered with Preservation Kentucky and Kentucky Tourism, Arts and Heritage Cabinet on a new statewide tourism initiative. Tour120 launched with a media event May 8 at the Crescent Hill Gatehouse. Tour120 is a year-round marketing effort to promote historic sites in Kentucky's 120 counties. The first event was May 18 and included tours of Louisville Water's historic sites: the Crescent Hill Reservoir and Gatehouse and Louisville Water Tower and Pumping Station No. 1.

Several media outlets featured a partnership with Fern Creek High School that also includes Louisville MSD and the Louisville Water Foundation. The Foundation awarded an environmental science teacher a \$2,000 grant to construct a rain garden at the school to help control stormwater runoff. Students designed the garden and began planting in April and along the way, educators from Louisville Water and MSD delivered classroom programming.

It's a challenge to effectively communicate with a workforce that has varying schedules. As part of our Strategic Business Plan Priority of "Employer of Choice," we are looking for opportunities to improve internal communications. We recently completed installing digital signage at most facilities, including the corporate office, Allmond Avenue, Crescent Hill, B.E. Payne and Louisville Water Tower Park. Communication staff updates the signage with announcements, news headlines and often information that's specific to the facility location

### **Customer Service and Distribution Operations Report Given**

Dave Vogel provided a summary of the customer service and distribution operations report for April.

Allmond Avenue celebrated an injury free first quarter that recognized employees from Distribution Operations, Metering Services and Inspections with a thank you breakfast. Leadership planned the event and served breakfast to our employees for achieving this milestone. Currently, we are running favorable to goal with only three employee injuries versus eight last year. Over the past several months staff has focused on ramping up and refreshing our employee safety messages and initiatives.

The Call Center operations received 27,460 calls in April with an abandonment rate of 10.2%. The average speed of answer for the month came in at 4:19 m:s which is in line with last year and slightly better than the five-year average. April performance over previous months reflects an improvement as we refresh our staffing vacancies and implement efforts to reduce call volume. We continue to recruit and hire new personnel and our next class is set to begin on June 3. There were 553 HomeServe sales in April, the highest number of sales since the program began. This was driven by a team-based contest in which agents earned raffle tickets for a TV if their team of four employees reached their goal. The front lobby handled 8,057 transactions (5,579 cash and 2,478 check) for the month.

The percentage of estimated bills in April (1.63%) came in higher than last year and in line with the five-year average. Year to date, estimations (1.80%) are significantly lower than both last year and the five-year average. The team continues to focus on working delinquent customer orders and is working down the backlog built during the winter months.

April finished with 20 main breaks, which is in line with last year (23) and the five-year average (20). Capital work continues to increase as we come out of the winter months including new service installations, fire hydrant replacements and installs, and valve replacements. The WAM Project continues ramping up for phase two (Distribution Operations) and a kick off meeting was held at the operations center with key employees who will be involved in the implementation. Warehouse transition to contractor supplied materials for Engineering projects continues to progress with 11 projects bid as contractor supplied.

April bad debt was the highest of 2019 thus far at \$141,188. This includes a \$40K bankruptcy account which, if removed, would place bad debt under budget for April. Currently, bad debt is running approximately \$100K under budget compared to the same time frame in 2018.



## **Engineering and Production Operation Report Given**

Mr. Raney provided a summary of the engineering and production operations report for April.

2019 capital program expenditures through April totaled \$19,082,919 which is \$6,943,430 or 26.68% lower than the same period last year. These expenditures equate to 17.51% of the 2019 total capital program of \$108,979,178.

The amount of water produced and delivered to the system in April 2019 was 107.3 MGD, which was 1.5% lower than April 2018 and 0.5% lower than the April five-year average. For year-to-date, the amount of water delivered to the system was 5.3% lower than 2018, and 1.7% lower than the five-year average.

There were 14 chemical spills reported by ORSANCO during the month of April; nine occurred upstream of Louisville Water's Zorn intake. There were no incidents that prompted additional treatment. All treatment goals were achieved.

Water Quality (WQ) staff monitored 1,193 water quality parameters of a required 1,033 per federal and state regulatory requirements. There were zero water quality violations.

Staff collected 280 compliance distribution samples. There were zero Total Coliform and zero E-Coli detections. All internal water quality goals were met. Staff also collected 40 main break samples on 20 repairs in the month, of which five localized boil water advisories were issued due to field conditions and zero were issued due to water quality monitoring results. There were a total of six water quality customer complaints, in comparison to the five-year average of 19 complaints.

## **Human Resources Report Given**

Terrence Spence provide the following summary of recent and current activity between the Louisville Water's Labor Management and Local Union 1683 of the American Federation of State, County and Municipal Employees, AFL-CIO (the Union).

- Currently there are six active grievances filed by the Union. Four under review for possible resolution, one pending recommendation for resolution and one in pre-arbitration status.
- Company and Union leadership participated in an ELT offsite team building continuation exercise at the Louisville Zoo facility.
- The Executive Union Management Alliance Council (EUMAC) met to discuss the Decision Partners Team (DPT). It was determined to eliminate the DPT and assign tasks to sub-teams to more effectively accomplish initiatives aligned with the Company's and Union's Strategic Plan.
- Management and Union representative concluded discussions to improve the Company's emergency over-time call/out procedures with no pilot agreement obtained.
- Union and Company representatives toured Southern High School's vocational magnet program that included Automotive, IT and Finance/Hospitality.

- Union and Company representatives through our partnership with Fairdale High School's Heavy Equipment Science Academies of Louisville program worked with students in the excavation and restoration of a large field at the school that needed various repairs.
- The Company posted six (6) regular full-time Union classified positions that were filled utilizing the Collective Bargaining internal bidding process.
- Union and Company leadership participated in Louisville Water's 2019 First Quarter Operating Status Update meeting.

### **Information Technology Report Given**

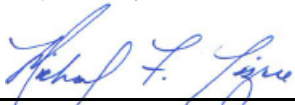
Dr. Luckett provided a summary of the IT report for April.

IT is working with Ernst & Young to support Phase I of the Oracle Work & Asset Management (WAM) implementation while also working on Phase II implementation. We are expecting to transition Phase I production support to Oracle Corporation at the end of the current E&Y agreement term in March of 2020.

The PeopleSoft support agreement with Sierra Cedar and the Oracle support agreement for all other Oracle modules has been approved through the Bids & Awards process and was approved by the Board earlier in this meeting. We expect to have all agreements signed by the end of May.

There being no further business for the Board, the meeting was adjourned at 1:45 p.m.

Respectfully submitted,



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Michael F. Tigue, Esq.  
Vice President, General Counsel and  
Corporate Secretary