



Policy and Services Committee MINUTES

Regular Meeting
Tuesday, March 10, 2015

Chairperson Burt called the meeting to order at 7:03 P.M. in the Council Chambers, 250 Hamilton Avenue, Palo Alto, California.

Present: Berman, Burt (Chair) DuBois, Wolbach

Absent:

Oral Communications

None

Agenda Items

1. Utility Meter Audit: Procurement, Inventory, and Retirement.

Harriet Richardson, City Auditor, provided a presentation describing the findings and recommendations of the Utility Meter Audit performed. She described the steps that should be taken by the Utilities Department and the Administrative Services Department (ASD) to properly purchase, track, inventory, and retire the meters. She identified the following findings and recommendations: 1) the Utilities Department has not established adequate processes and procedures for organizing and setting up meters in SAP, causing data discrepancies and errors; there were 4 recommendations, 2) the Utilities Department has incomplete, incorrect, and inconsistent meter records, which caused data reliability concerns and increases the risk of incorrect customer billing; there were 8 recommendations, and 3) the Utilities Department inaccurately reported the retirement of meters, which affected the value in the City's accounting records; there were 3 recommendations. The actions taken to date include the ASD and Utilities Staff meeting to achieve a better understanding of the individual department needs for a more accurate procurement, inventory, asset tracking, and retirement process.

James Keene, City Manager, stated in the audit process there was a formal response process from the subjects of the audit. Tomm Marshall, the

MINUTES

Assistance Director of Utilities and David Ramberg, the Assistant Director of ASD were available to answer questions.

Tomm Marshall, Assistance Director of Utilities, concurred there was merit in the findings and recommendations. Staff was taking actions to correct the errors but he noted a number of the errors dated back many years. There were 76,000 meters installed with an average life span of 20 years.

Mr. Keene asked Staff to add context to the discussion for a clearer understanding for the Council. He asked for an explanation of the "average moving price" that was applied to the meters.

Mr. Marshall acknowledged the majority of the meters throughout the City were residential with a procurement cost of \$15 to \$100 each. The customer was not charged the cost of the meter. The customer billing rate was based on the market and set at a rate schedule.

Mr. Keene asked Staff to specify why Utilities used the average moving price for meters rather than tracking and accounting for absolutely every meter in the system.

Mr. Marshall stated the pricing of meters was a warehouse function; Utilities did not establish the method for pricing in SAP. The decision when SAP was implemented was to do average moving price for products as they came in. Essentially you buy a new meter and when it was entered into the system, the price was averaged with the existing meters.

Council Member DuBois asked how SAP was maintained.

Mr. Marshall stated SAP had systems maintenance which was partially the responsibility of IT Business Analysts, and Utilities had four Staff members that maintained the Utility Billing System within SAP. Administrative Services Department (ASD) had Staff performing the material management portion. Data entry was performed by a meter person.

Council Member DuBois asked if any of the recommendations involved changes within the software itself.

Mr. Marshall explained the SAP System was complicated; especially on the retirement side of the meters. He believed one of the recommendations was to review the SAP retirement side of the software for a more integrated and efficient process.

MINUTES

Council Member DuBois was uncertain if the capability to make those changes was within the City Staff or if there were outside consultants required.

Mr. Marshall noted making any changes to SAP was expensive and the City was looking at what amount would be spent to fix the problem while they were looking into a new billing system.

Council Member DuBois asked if there was a metric for database consistency of error rate for large database systems.

Ms. Richardson noted one of the recommendations was for Utilities to establish what an acceptable error rate was. The Audit Staff attempted to identify what was an industry standard.

Council Member DuBois recalled Staff mentioned the value of the inventory was understated. He asked whether the remark was regarding materials. He asked what the life of the meter was and how long it was in the asset inventory.

Ms. Richardson stated the meters were depreciated on a 40-year basis but they were looked at as having a 20-year lifespan.

Mr. Marshall clarified the life of the meter was dependent upon how long they were on the books. There was a depreciated life and each one was reviewed individually. With depreciated materials they were brought in for review and calibration testing. If the calibration was good they were re-deployed.

Ms. Richardson stated the amount was not material in reference to the financial statements.

Council Member DuBois said the report referred to two steps for retiring a meter; the physical and the technological. He asked why there were two and if there could be a combination into one.

Ms. Richardson explained the physical retirement was when the meter was physically being disposed of and was no longer in use or on the asset inventory. The technological retirement was when it was retired from the SAP and accounting systems.

Council Member DuBois asked if the person physically removing the meter was not retiring it at the time of removal.

MINUTES

Mr. Marshall stated yes, that was correct. Part of the process was once it was removed from the residence it was brought in to the shop for testing for accurate readings. The shop held the meter for 45-days because the customer had 30-days to contest the readings. Once the customer was satisfied, the meter would be technologically retired.

Council Member DuBois asked if customers were billed incorrectly and had it been fixed.

Mr. Marshall stated there was a Southgate neighborhood error which was found prior to the Meter Audit. During a physical inspection it was noticed there were 1 inch meters but the neighborhood rate was at 5/8 inch. That material mishap was from a Capital Improvement Project (CIP).

Council Member DuBois asked if the matter had been corrected.

Mr. Marshall stated the customers had been back billed.

Council Member DuBois clarified the customers had been under billed.

Mr. Marshall stated the meters only measure the cubic feet of water used. In the past few years there had been fixed charges added to the water utility meter rate which escalated the rate which created a significant gap between the rate of the 5/8 and the 1 inch meters. Those customers had been back billed to correct the billing error.

Council Member DuBois asked given the size of the Utilities Department did the Auditor feel there was ample staff in her department.

Ms. Richardson stated there was one auditor dedicated to the Utilities Department. She announced the reason the findings showed the Southgate error was to reflect the length of time an error could go before being detected.

Council Member Berman asked how the Utilities Department came to have an audit.

Ms. Richardson stated before she came to the City there was an inventory audit performed. That audit identified some issues with the meters inventories.

Council Member Berman asked for clarification to the Utilities Department response to the audit findings.

MINUTES

Mr. Marshall explained for Finding Number 1, Staff was continuing to use the same specifications although Staff was working with the Purchasing Department to make sure they had the correct materials number assigned to the correct meter.

Council Member Berman asked how the issue of the incorrect badge number was resolved.

Mr. Marshall stated electric meters came with serial numbers but once they were purchased by the City they were assigned an individual badge number.

Council Member Berman noted the audit recommended better and more efficient ways to place badge numbers.

Mr. Marshall stated Staff had agreed to allow the SAP System to assign the badge number as the meter was entered into service.

Council Member Berman asked if having SAP assign the badge numbers alleviated the concerns from the Auditor's office.

Ms. Richardson stated yes, that was the recommendation.

Council Member Berman asked why the format of the audit changed. He recalled the prior audits were more easily readable with findings, recommendations and response in an order.

Mr. Keene clarified there was a matrix type format which was an attachment to the cover letter. He noted Auditor Recommendation 1.2 that the Utilities Department partially agreed.

Council Member Berman asked what the partial disagreement was regarding.

Ms. Richardson stated the Utilities Staff had addressed the issue. She believed in the beginning, Staff was unclear of what was needed from the Purchasing Staff. Her understanding was since the initial response, Staff from both departments had met and the issue had been clarified.

Mr. Marshall stated initially when the specifications were written there needed to be one for each type of meter. He acknowledged that was not practical for the number of meters throughout the City. They resolved the issue by writing a specification and sat with the Purchasing Staff to provide them with a better understanding of what was needed to be ordered with any particular material number.

MINUTES

Council Member Berman noted Finding Number 2 consisted of re-reading meters. He asked how time and cost intensive was that process.

Mr. Marshall stated prior to the billing being sent out there were parameters reviewed and compared for accuracy. There were a number of items that may cause a misread; vacation where the usage was noticeably lower than the previous month or guests where the usage was noticeably higher than the previous month.

Dave Yuan, Senior Management Analyst, explained during his time in customer service the exception reports were mostly from zero consumption readings. The investigations on meters were done when a read was too high or too low and the reason for the re-read was to verify the meter was reading accurately. There were three dedicated Staff members assigned to read meter readings daily.

Council Member Berman asked if a 20 percent spike either direction was an industry standard.

Mr. Yuan stated the three Staff members also handled the billing, invoicing, and adjustments to either item. They were not dedicated to re-readings.

Council Member Berman asked if the billing invoices were strictly for the exceptions or all.

Mr. Yuan stated all of the billing and invoicing including the exceptions.

Council Member Wolbach noticed there were two Findings that had partial Staff agreement; Numbers 1.2 and 2.3. He asked for the City Auditor's impression of the status of the partial agreements. He understood there had been meetings and changes since the information had been released.

Ms. Richardson said Utilities Staff had met with ASD Staff and had reached an agreement regarding Number 1.2. She felt they would be changing their response from partially agree to agree. She believed on Number 2.3 there was a misunderstanding on what the audit expected of Staff. The SAP system had capabilities the audit was requesting Staff to perform; it would not take additional Staff time or increase cost.

Council Member Wolbach asked if the City Manager or Assistant Director Marshall had additional information.

David Ramberg, Assistant Director for Administrative Services Department, explained ASD Staff had reviewed the capability of the SAP System and

MINUTES

concurred with the City Auditor of the system's ability to comply with the recommendations. Once the Purchasing Department received the information from the Utilities Department they would input into SAP and generate a badge number. That badge number would follow the order to the vendor. The vendor would mark the unit with the generated badge number prior to the meter being released to the City.

Mr. Marshall mentioned one of the issues in the meter retirement process was there were a lot of pieces that should be tied together but were not. That allowed the person entering the data to input incorrect or inaccurate data. Correcting the errors was not insignificant or inexpensive.

Ms. Richardson agreed that SAP was a complicated system. She did not believe when the system was first deployed Staff had an understanding of those complexities. She was aware the Chief Information Officer (CIO) was looking into a new or different type of system. She expressed the importance of the new system being implemented correctly in the beginning and that the City was taking full advantage of the capabilities. SAP had the capability to connect tables so when information was entered once it was connected to the other tables necessary to follow the materials. That was not set-up initially which was how errors occurred because multiple data was entered at different times for the same item.

Council Member Wolbach stated given the status of the audit, the responses and the response to the responses, he asked if there was a hesitation from the City Auditor, the City Manager or the Utilities Department not to move forward sending the recommendation to Council.

Ms. Richardson felt the actions being taken were positive and she was comfortable requesting Council approval. She noted there was a follow-up process which required audited departments to report back to the Committee every 6 months after Council approval.

Council Member Wolbach understood not wanting to implement modifications and changes to the existing SAP System with the knowledge of a new system being implemented.

Mr. Keene stated given the new process of a 6 month follow-up that timeframe set the tempo of what was expected. He said if SAP was to migrate to a new Electronic Reporting Program (ERP) it would be a multi-year process.

Mr. Marshall mentioned the Utilities Department was looking into initiatives for Smart Meters for gas, water and electric meters. Once that system was

MINUTES

implemented there would be a full scale replacement of meters. At that time it would be more efficient to complete the discussed processes. The new meters were self-reporting so a number of the issues in the audit would no longer be valid.

Council Member DuBois understood there was a 6-month check-in but most of the corrections were targeted for June. He noted the current members were only seated for a twelve-month term so as a practical matter most of the follow-up would be with a different group of members.

Ms. Richardson encouraged departments to return to the Committee once implementations had occurred. She explained the 6-month return was for the benefit of the Staff because some recommendations may take longer to implement.

Chair Burt asked whether there should be any effort to align the audits and the responses so that a given Committee would be able to go through a full cycle. The theory would be to have the audit presented in the first half of the year and the responses in the second; the same Committee would have continuity in the process.

Ms. Richardson stated the Ordinance would need to be changed to accommodate the timeframe but Staff could reconsider the process. She was open to discussing the possibility.

Chair Burt asked the City Auditor to work with the City Manager to view the cycle going forward.

Ms. Richardson agreed.

Chair Burt asked for more clarification from Staff regarding Recommendation 1.2 engineering specs and other descriptions as the basis for why it would not be practical to have an engineering spec for each meter.

Ms. Richardson clarified the recommendation was not to write a unique spec for each item, but rather continue with the performance based specification. If there was a need to add more specific information to assist ASD, Purchasing Staff needed to understand what was needed to be purchased.

Chair Burt stated the term engineering spec meant a greater detail to the Utilities Staff than what was intended in the findings. He asked Staff with the clarification from the Auditor as to what was acceptable to achieve the end result, did the Utilities Department agree with the clarified request.

MINUTES

Mr. Marshall stated yes.

Chair Burt stated under Finding 2.3, it spoke to ensuring the meter description carried through the meter procurement process to retirement. Utilities Staff's comments were regarding the inefficiencies of the retirement process under SAP. He asked how the SAP inefficiencies effected the meter descriptions carrying through from procurement to retirement.

Mr. Marshall noted there were multiple locations within the SAP System where there was a meter description; the meter material number, the utility billing section. Because those areas were entered separately and by different Staff, those descriptions for the same items did not always match.

Chair Burt asked if there was an item or part number that tracked with a description.

Mr. Marshall stated yes, in the materials module.

Chair Burt understood there was not an issue with material numbers maintaining their consistency from procurement to retirement but the issue was the description varying.

Mr. Marshall stated yes with a caveat. The retirement process alone had multiple modules in SAP.

Ms. Richardson shared an example for the Committee. In the report there was a master material number: 0280000. The device category description was different from the material description in two separate places. Further below in the process it showed another input where Staff attempted to correct the error and that correction itself was different from both of the previously entered descriptions.

Chair Burt asked what level of consequence occurred as a result of the mis-entry of descriptions for the same item. He understood with the current SAP System it was a difficult situation to resolve.

Ms. Richardson said basically it made it difficult to know what types of meters were in the field when the descriptions did not match. The uncertainty caused inaccurate accounting.

Chair Burt asked when a meter was replaced, was it replaced based on description or material number.

MINUTES

Mr. Marshall stated the badge numbers were in sequential order and Staff could look back and see when the meter was replaced last. The SAP System was not used to determine which meters were to be replaced.

Chair Burt asked what remaining problems were seen by the Auditor given the replacement description by the Utilities Staff.

Ms. Richardson stated if the description information in SAP was not utilized it was not as significant as initially thought.

Chair Burt understood Staff's description of when the meters were retired was when they stopped working correctly. He felt that manner was problematic; it meant that after failures became apparent it triggered a replacement.

Mr. Marshall stated some meters were replaced based on their badge number and date. He understood in the audit there were discrepancies found because some of the meters were placed prior to computers storing all of the information.

Chair Burt asked if the meters did not have the ability to have calibration checks.

Mr. Marshall stated that test could be performed; however, it could not be performed in the field. The meter needed to be removed from the field and brought to the shop.

Dean Batchelor, Assistant Director for Utilities, explained the Utilities Department followed standards set by the American Water Works Association (AWWA). There was an association for gas as well. The typical timeframe was 17-20 years. Staff would remove the meters from the field and verify their ability prior to them becoming problematic for the customer. At the time of removal, a new meter was installed with a new badge number.

Chair Burt clarified as a preventative basis the meters were being taken off line prior to the anticipated effective retirement date. He asked if there was a sampling of reliability of the meters removed at the 17 year mark.

Mr. Batchelor stated each meter removed was tested.

Chair Burt asked for statistics for the frequency the meters were out of spec at the time of removal.

MINUTES

Mr. Batchelor stated yes they maintained all of those records on a yearly basis.

Chair Burt asked if Staff had an approximate percentage of reliability.

Mr. Batchelor noted on the water meter side they ran at approximately 91 percent accuracy. On the gas meter side they were closer to 86 percent.

Chair Burt asked, based on those percentages, what would be the cost and benefit to the rate payer or the City to pull the meters at 15 years rather than 17.

Mr. Batchelor stated the benefit would be to the City.

Chair Burt asked if Staff felt it would be beneficial to perform a pilot sampling, enough to be statistically accurate.

Mr. Batchelor stated it was possible but his concern was as the City moved forward with the meter exchange for water the average cost would rise from \$50 up to \$270 per meter.

Chair Burt asked if the cost increase was because of the change to Smart Meters.

Mr. Batchelor stated that was correct.

Mr. Marshall noted the City already moved to electronic Smart Meters for water. The electronic meters had a different life cycle from the ones being discussed. It was anticipated between 15 to 17 years based on the battery life.

Chair Burt believed there was value in knowing the value of accuracy at the time of removal. He felt 91 and 86 percent were low performance numbers.

Mr. Marshall stated no meter had 100 percent accuracy across the range of all aspects. He agreed it was worth the effort to complete a pilot sampling analysis.

Chair Burt stated water being the side of utilities with the commodity having the increase; with what may have been a cost benefit five years ago would be changed in recent years.

Mr. Marshall agreed.

MINUTES

Chair Burt asked if there were other issues with the audit that ASD played a role where Utilities Staff would like to see additional changes or were the responses from ASD fully accepted.

Mr. Ramberg stated yes he felt the responses from ASD divisions were accurate and acceptable. He felt the audit was beneficial and ASD had agreed with the recommendations. Recommendations 3.2 and 3.3 had to do with steps that had not been discussed in detail during the meeting but it was relating to the retirement of meters. ASD agreed with the finding of the processes needing to be more in sync. They were putting steps and processes into place to sync with Utilities more thoroughly. He explained a new technology solution called DocuSign which was a web-based workflow tool. Paper documents were now flowing through DocuSign and they were tracked, DocuSign was the ultimate repository with unlimited space.

Chair Burt asked when DocuSign was implemented.

Mr. Ramberg said implementation began in the Purchasing Division in 2013 and it had begun to filter through other departments. In late 2014, the system began to be used for items such as in the audit recommendations.

Chair Burt understood the South Gate matter was 20 years ago and the audit did not detect the issue.

Mr. Marshall stated that was correct, the matter was detected by Utilities Staff prior to the audit.

Chair Burt mentioned the audit brought forth several examples of issues. He wanted to understand if the South Gate issue example was a single exception. The audit only reviewed 15 percent of the meters.

Mr. Marshall explained what happened in the South Gate area was a one off situation, having to do with a CIP project. That did not mean there were not other errors in the records. There was a Staff member assigned to track the discrepancies between the records and in the field.

Ms. Richardson stated the Auditor's Office would be using the current errors to quantify during the next audit. The next audit would include a statistically valid sample which would include actual field work for the Audit Staff.

Chair Burt asked if the audit report would be updated to reflect the additional Staff work and completed responses prior to going to Council.

Mr. Marshall stated yes.

MINUTES

MOTION: Council Member Burt moved, seconded by Council Member Berman that the Policy & Services Committee recommend the City Council accept the Utility Meter Audit.

MOTION PASSED: 4-0

The Policy & Services Committee took a break at 8:25 P.M.

2. Recommend Adoption of Revisions to the Green Building Ordinance and the Energy Code Ordinance.

Peter Pirnejad, Director of the Development Services Center, introduced the team brought to answer questions for the Policy & Services Committee (Committee); Farhad Farahmand from TRC, Melony Jacobson the Green Building Consultant and George Hoyt the Chief Building Official. Gil Friend, the Chief Sustainability Officer was available to discuss how their effort collaborated with and paralleled the work he was doing in the Sustainability Action Plan and the Climate Action Plan. He mentioned the Development Services team had been working closely with the sustainability team to ensure the changes in the code were forward facing and aggressive towards sustainability. Shiva Swaminathan, a Senior Resource Planner with Utilities was available to discuss the collaboration the Development Services team has had with other departments. Judith Wasserman was available from the Green Building Advisory Group. He explained the Code change process began in 2013 when Staff elicited responses and solicitations from architects, experts, other stakeholders in the community and City departments. He provided a presentation outlining the scope of the Green Building and Energy Code Ordinance changes. His hope was to bring the completed changes to the City Council for approval on April 20, 2015; Earth Day. The Green Building Ordinance reviewed site design, water efficiency, materials, air quality and the like. The Energy Code was strictly for energy efficiency. The Green Building Advisory Group received the suggested changes and they were solicited for feedback. The Reach Code was requiring energy efficiency beyond the minimum energy efficiency requirements. The Code cycle happened every 3-years and each cycle the Energy Code becomes more restrictive. The Green Building Advisory Group (GBAG) had been working on a yearlong vetting process which has been a policy level effort. Staff had asked for leadership in the areas of air quality, indoor air quality, water quality, water efficiency, and landscaping. Staff and GBAG have hosted monthly meetings since 2013. Once the Code was put into place the City had 6-months to adopt the changes. Within the 6-month period the City Staff should have already begun the analysis, the cost effectiveness study, and other vetting processes and have brought them before the

MINUTES

Committee and Council the 1st and 2nd time in order to take the accepted changes to the Building Standards Commission (Commission). Although Palo Alto has been staying ahead of the changes by the State, they were catching up quickly. The State set a mandate of zero net energy for all residential development by the year 2020. Palo Alto was being more aggressive and was targeting that goal for 2016. In 2030 the zero net was targeted for commercial sites, Staff had scheduled the goal for 2025.

Melony Jacobson, Green Building Consultant, discussed the Energy Reach Code and proposed changes to the Ordinance. The Cost Effective Study studied the point the cost was effective above the baseline minimum code to adopt an Energy Ordinance that met the criteria of the Commission. Renovation projects had 2 options; 1) performance method or 2) prescriptive. Solar ready infrastructure was studied and determined an increase of 5 percent roof space on new home construction dedicated for future installation should the homeowner decide at a later date wish to pursue solar. The Green Building Ordinance change was to move to the CalGreen (California Green Building Code) which was a code based system. Staff was recommending a laundry to landscape ready infrastructure. This allowed the laundry water to be used for landscape watering and did not require a permit.

Judith Wasserman acknowledged the Staff for their outstanding work. The Ordinances were complicated and tricky; there were a number of places where there were conflicts between the Green Building Code and Energy Code. She recognized Palo Alto would soon not be ahead of the State and it would be more difficult to build.

Chair Burt stated a member of the GBAG, Tom Wagner, had concerns. He asked if Ms. Wasserman was familiar with the concerns and whether or not she could comment.

Ms. Wasserman believed Mr. Wagner had concerns with Build It Green, the current company used, from the process because Staff was recommending going with CalGreen as the new standard. He felt with more alternates there were better outcomes. Presently, if you chose to use Build It Green the customer paid the City's fee and the Build It Green fees.

Chair Burt asked if the issue was raised at the last GBAG Committee meeting.

Ms. Wasserman stated yes; although, there were a large number of issues mentioned at the same meeting.

MINUTES

Chair Burt asked if there was consensus by the GBAG Committee when Mr. Wagner raised the issue.

Ms. Wasserman noted there were members who could have gone either direction but there was not a consensus.

Council Member Wolbach asked Staff if they had a response to Mr. Wagner's letter.

Mr. Pirnejad stated the GBAG Committee had been meeting since 2013, the issues had been highlighted in the retreat in August and identified the areas Staff wanted to pursue a leadership position in. The draft Ordinance had been reviewed in two separate prior meetings. Staff had heard from all of the GBAG members and had addressed the concerns with the amendments being proposed. In response to question 1; the study did show a 15 percent compliance margin was cost effective using the California Energy Commissions "Life Cycle Cost Methodology". The methodology had been used since 2005 and was accepted as the industry standard in California. This was an intermediate step in working toward the Zero Net Energy Code. In response to question 1a; builders who found it difficult to achieve compliance margin had the option to implement the measures set in the Cost Effectiveness Study. In response to question 1b; the results of the Cost Effectiveness Study did not indicate a bias towards large two-story homes. The single story home with a high-performance attic and an instantaneous water heater was a compliance margin of over a 23 percent base code. A two-story home had a compliance margin of 21 percent. Both prototypes exceeded the 15 percent threshold recommended by the Ordinance. In response to question 1c; Build It Green served its purpose when green buildings were new to the industry. The building codes proposed were a more enforceable way to show buildings were meeting specific areas deemed necessary by the City. Build It Green was a point based system that was separate and apart from a code enforcement based system. In response to question 1d; the GBAG Committee and Staff agreed to remove "quality insulation and installation" from the list of pre-requisites required for tier 1 and tier 2. In response to question 2a; stopwaste.org had completed a side by side comparison of Build It Green Tier 1 and Tier 2. Using a building code based system allowed the City to enforce green building codes similar to how other parts of the building code were enforced. In response to question 2b; this was still acceptable as an option but not in lieu of tier 1 and tier 2 compliance.

Council Member Wolbach asked Ms. Wasserman if she had comments to Staffs reply to Mr. Wagner.

MINUTES

Ms. Wasserman stated the Code had items that were not as apt in reality as they were on paper. She explained on-demand water heaters were preferred by the Code. The idea was they were low cost and maintenance free. The on-demand water heater did not replace an existing water heater without upgrades to a 3/4-inch gas line because although they do not use a lot of gas throughout the day, upon initial start-up the amount of gas used was extensive. When you had hard water the on-demand water heaters tended to jam the filter.

Council Member Wolbach asked if Ms. Wasserman had a comment regarding the single story attic compliance.

Ms. Wasserman stated working with a smaller house could be feasible although there were more hoops to jump through where working with a larger house there was more materials and space. In speaking of sustainability nothing was quite as sustainable as small.

Shiva Swaminathan, Senior Resource Planner, explained the Utilities Department was part of the process and they were gearing up to support the Ordinance as it becomes implementable; providing rebates. The energy savings captured beyond that of the State requirements could be reported to the California Energy Commission (CEC).

Gil Friend, Chief Sustainability Officer, felt the proposed Ordinance was the outcome of stakeholder engagement. He believed in order to keep Palo Alto in the forefront of issues Council needed to accept the proposed Ordinance and make necessary changes during the cycle. This was part of the process of exploring when and how Palo Alto could become a carbon neutral city.

Council Member Berman acknowledged the State released this specific set of Code in 2013 and Palo Alto was taking care of their portion in early 2015. The new sections of code would be released by the State in 2016. He asked when the GBAG would reengage to present additional measures for the City to take.

Mr. Pirnejad stated almost immediately. Once Staff presents the current code changes to Council the GBAG team would be back in session to begin anew.

Council Member Berman was excited to see the solar ready and the laundry to landscape element in the proposal.

Council Member DuBois mentioned he received an email from a citizen regarding cisterns. He noticed there were no comments about them in the

MINUTES

Staff Report. The citizen was inquiring about a rebate program. If a resident was willing to put in a large cistern system why would the City not rebate them as they would with a business.

Mr. Pirnejad stated he would inquire from the Utilities Department since that would be a water rebate.

Council Member DuBois requested Staff follow-up and noted he would provide the email from the citizen.

Mr. Pirnejad agreed.

Council Member DuBois inquired on where there would be additional bullet points added in.

Mr. Pirnejad stated on the last slide of the presentation there were four points. He noted three of the points would become part of the Code but the last point was reiterating there would be training and outreach.

Council Member DuBois asked how the City could prevent getting backed up with requests for waivers for appeals.

Mr. Pirnejad stated there was a vetting process performed to verify and validate requestors met the criterion for the appeals.

Council Member DuBois asked what was driving the timing, the GBAG members seemed to feel there was not adequate time.

Mr. Pirnejad clarified once the Ordinance was released there were two subsequent meetings. The present meeting would be counted as a third and there would be a follow-up meeting after to answer any additional questions.

Council Member DuBois asked if there were external forces driving the date.

Mr. Pirnejad stated the code cycle updated every three years; in June of 2015 the state would release the next rendition of the California Energy Code. Therefore Staff needed to begin work.

Council Member DuBois asked if that was the next three year cycle.

Mr. Pirnejad agreed.

Council Member DuBois asked for clarification Staff was working on the current update and would begin again for next year.

MINUTES

Mr. Pirnejad stated once the proposed Ordinance passed Staff would begin the next code update. The next update would learn from the current code cycle.

Council Member DuBois said if the State cycle was set three years apart, when was the intended City update.

Mr. Pirnejad clarified the State code cycle was released in June of a specific year and the City was mandated by the State to pass their code by the following January. For example June 2016 would be the State release and the City would have to have their code adopted by January 2017.

Council Member DuBois asked why the current code cycle and the 2016 cycle appeared closer than the rest.

Mr. Pirnejad explained the California Energy Commission had a delay and postponed the release until January of 2015 rather than the anticipated June 2014.

Council Member DuBois inquired on the learning curve for construction with the new codes being so close together.

Mr. Pirnejad said Staff understood that could be an issue which was why it was determined not to stop the outreach. The goal was to quickly move into the training and outreach phase.

Council Member DuBois asked whether or not there had been discussion of the Leadership Ordinance to only apply to larger homes.

Mr. Pirnejad stated for net zero homes program had an energy cap and was required for homes above 2,000 sq. ft.

Council Member DuBois asked if the GBAG ever took votes or straw poles.

Mr. Pirnejad stated there were hand votes taken during the retreat on where the group wanted to be in a leadership category.

Council Member DuBois asked how much disagreement occurred.

Mr. Pirnejad said there was not much in the way of disagreement but there was dialog. Some members were more concerned about energy efficiency while others were worried about bird strikes or air quality.

MINUTES

Council Member DuBois asked the timeframe used in the Cost Effectiveness Study to review the payback.

Farhad Farahmand, TRC, stated they used a 30-year timeframe which was the expected lifetime of a measure once installed.

Council Member DuBois asked if the roof for new construction was required to have empty space for the 500 sq. ft. of solar readiness or was the roof prepared in some manner.

Ms. Jacobson clarified there was a dedicated solar zone of 500 sq. ft. for future installation.

Council Member DuBois asked if there were brackets or any type of preparation.

Ms. Jacobson stated there was conduit or empty piping that traveled from the electrical panel up to the roof line. That preparation allowed a solar installation to occur with more ease at a future date.

Council Member DuBois noted the implication was Palo Alto wanted to be ahead of other cities. He asked what the cost and benefit was to Palo Alto for being ahead.

Mr. Pirnejad said one way to look at cost was to review the outlined cost in the Cost Effectiveness Study, another was how quickly were contractors able to absorb the changes that maybe other cities were not requiring. He could not speak to the cost of Palo Alto being ahead of other cities but he noted the caliber of architects and contractors performing work in Palo Alto was a step ahead of other cities. The property values were much higher here than a five mile trip in either direction.

Chair Burt tackled the high level question of why the City wanted to lead in this arena. Purely from a cost standpoint land and the incremental costs for construction showed up in the mortgage payment and that was offset by the reduced cost of utilities. In theory there would not be a net impact on cash flow costs to someone who was building, either a remodel or new construction. If the measures installed were still working after 30-years it would be a net gain. There has been a succession over many years and many City Council's reflecting community values that Palo Alto has embraced both a sense of responsibility toward high environmental standards and willingness and a determination to be leaders for the purpose of helping to establish new and better practices that would be models, just as California has done. Nationally, energy efficiency standards and renewable portfolio

MINUTES

standards that were pioneered in California and were initially thought to be questionable as to whether or not they were really something that could be followed elsewhere have eventually served the nation well by establishing more efficient appliances and a myriad of other things. The City has lower electricity costs with cleaner electricity than any surrounding city. Any change from that would need to have a high level policy discussion on reconsidering our value structure which he would not support. On the net zero timeframe, first, step 2 was larger residential and not until 2025. He asked why it was schedule in a specific sequence; was it being driven by the State sequencing and was the sequencing Palo Alto should follow. He asked why Palo Alto would not move towards commercial first.

Ms. Jacobson stated homes were a simpler application to a building in the design and construction process. Commercial construction did have inherent issues that the Energy Commission was addressing first that prohibited the zero net energy approach. Mainly around the loads of the buildings, the amount of energy it was drawing at certain times and the ability of renewable technology were currently to fill in the loads.

Mr. Farahmand noted his firm had been involved in a number of the road maps to Zero Net Energy. Ms. Jacobson was correct in that the loads in a residential were generally lower than in a commercial building. Schools and warehouses were on the list as the first commercial buildings to be fitted as Zero Net Energy commercial buildings.

Chair Burt questioned the proposition for commercial was the year 2025 and only for some commercial. He asked when would be the correct opportunity to return to the Committee or go before the Council to insure the sequencing the State was enacting may not necessarily be what was right for Palo Alto.

Mr. Pirnejad acknowledged the timelines presented to the Committee were rough. Staff had identified there were larger hurdles to be had in dealing with large commercial reaching Net Zero than residential. Office buildings were dense structures packing a lot of people with very little floor area.

Chair Burt said the commercial buildings did not have surface parking with a great space for solar potential. If there was a low consumption use with a high land area it may be more readily doable. He asked where multi-family fit into the scenario; was that considered large residential.

Ms. Jacobson stated step 2 referenced large single family homes. Multi-family would fall between step 2 and step 3.

MINUTES

Chair Burt asked for confirmation regarding the threshold being reduced from 1250 sq. ft. to 1000 sq. ft. was on remodels.

Ms. Jacobson stated the reduction was for both remodel projects and new construction. The reason was so projects that triggered one Ordinance would also trigger the second Ordinance.

Chair Burt asked if there was a mandate below the 1,000 sq. ft. threshold.

Ms. Jacobson stated below the 1,000 sq. ft. threshold would be the minimum State requirements; anything above would be the City's requirements.

Chair Burt asked if the City wanted to consider a lower requirement but with something in between for a 500 sq. ft. addition. He mentioned some cities were requiring solar ready installation on new construction while other cities were examining the probability. He asked if there was a consideration of that.

Mr. Pirnejad stated yes. The City of Lancaster required solar on new homes.

Chair Burt understood the Town of Atherton was considering that as well.

Mr. Pirnejad noted the conflict Palo Alto had was with the trees. When new homes were constructed with a dense tree canopy there was not a great opportunity for solar. For Staff to mandate the installation of solar on new construction appeared aggressive.

Chair Burt believed it was far less expensive to install solar paneling at the time of construction than after the fact. He agreed not all sites were good for solar. There was a rating system performed on each solar site by the installer. He felt there could be an objective standard based upon that analysis; if a site was below that determined number of performance rating the project qualified for the exception. The matter of what to do with trees that were getting larger over time was brought up by the State Legislation Shade Trees Act. He asked why Palo Alto could not have the solar as a default allowing for exceptions and why the pre-existing conditions that prohibited appropriate solar ability were not part of the exception list.

Mr. Pirnejad stated as a group and committee they felt this was the first entry point and would be an easy way to enter the market. Staff was willing to work on that for the next code cycle. The issue was Staff would need to perform a Cost of Effectiveness Study for that specific mandate since it would be in excess of Title 24. He was not certain the numbers supported mandating solar installation.

MINUTES

Mr. Farahmand noted it would be dependent on the utilities usage of the individual home. That type of research would require a comprehensive analysis. The measures researched and being discussed were based on the 2016 Code implementation.

Chair Burt asked how companies like Solar City did their financing off of reduced utilities if it was not typically cost effective.

Mr. Farahmand stated from his experience those were typically longer payback periods of 20 to 25 years.

Chair Burt believed the Cost Effectiveness Study was based on a 30-year cycle.

Mr. Farahmand said that was true, it was based on a 30-year payback cycle.

Chair Burt wondered if Solar City was getting 20 to 25 years at worst, and the City's was 30-years, why would ours not calculate.

Mr. Farahmand stated it was worth investigation.

Chair Burt requested Staff add the matter as a place holder for consideration of Council evaluation for the next cycle. As a practice, Committees such as the Policy & Services Committee do not provide policy direction to Staff.

Ms. Jacobson noted the Green Building Advisory Group had discussed solar readiness being a step in the direction of zero net energy. At the level of zero net energy it almost required a solar installation.

Chair Burt confirmed the laundry to landscape process did not require a permit in Palo Alto.

Mr. Pirnejad stated yes, that was correct. However, by mandating it as part of the initial construction the City could ensure it was done properly.

Chair Burt clarified his point was how many residents were aware that was a process that could be readily completed; especially in the drought years. He suggested informing the residents of the programs available, possibly via the utility bill inserts. When the State reviewed the different types of formulas utilized in the new codes, was there an acknowledgement of a different environmental benefit calculous toward switching to electricity. He was not certain the environmental analysis applied equally in the Palo Alto environment versus elsewhere.

MINUTES

Mr. Pirnejad acknowledged that was part of the struggle Staff had. The way the California Energy Commission saw electricity was still in the original definition of electricity generated from coal power plants. The movement was toward a clean model of electricity. Because of the difference in definition Palo Alto was dinged by the State for mandating homes go to all electric.

Chair Burt had discussions with the local Legislatures who were open to hearing legislation that would help the issues. He asked how these changes would transition into aggregate benefits in terms of environmental impacts. He noted the struggle with having the regulatory requirements align with some of the leading edge approaches such as Palo Alto's clean electricity.

Ms. Jacobson stated in terms of measurements, the process being set-up by Staff was a comprehensive survey of buildings to actually measure the savings which equated to greenhouse gas tons avoided. The California Energy Commission had multipliers that translate to greenhouse gases avoided.

Chair Burt clarified there was an anticipation the actions being taken would correlate to an amount that was projected.

Ms. Jacobson stated yes, there was a long process the California Energy Commission went through to evaluate each measure and the savings generated by the measure.

Mr. Farahmand stated a case study was completed resulting in the lifetime energy, gas and greenhouse gas savings for each measure placed into the Title 24 Code.

Chair Burt asked for some sort of reference point of the beneficial impact to be included in the report for its return to the City Council.

Ms. Jacobson said Staff would include the greenhouse gas calculations in the report.

Chair Burt noted the typical conversations in greenhouse gas reductions were in tons, it was difficult to imagine the amount of a ton. He asked to add a percentage amount for a better understanding.

Mr. Pirnejad stated TRC could provide that information.

MINUTES

Council Member Wolbach asked if the changes presented by the GBAG were in addition to the Staff recommendations.

Mr. Pirnejad stated those were highlights of what would be introduced into the Ordinance by the time the full Council reviewed it.

Council Member Wolbach asked if there was an opportunity for changes to the Ordinance prior to Council review.

Mr. Pirnejad stated provided Staff did not need to perform a Cost Effectiveness Study or additional community outreach, it was possible.

Council Member Wolbach noted in Mr. Wagner's letter, Item 2B, the GPR certification, could be included but was not. He asked why.

Mr. Pirnejad clarified the mandated rating system was that Tier 1 and Tier 2 be complied with. In addition, if someone would like to participate in any other rating system such as; Living Building Challenge, a USCBC, or BIG, Staff welcomed it but it would not be mandated.

Council Member Wolbach asked if there were incentives beyond mandates for items such as installation or the use of additional rating systems.

Mr. Pirnejad stated Staff was working with the Utilities Department on incentives programs.

Council Member Wolbach asked the cost for the 3-way diverter valve for gray water.

Ms. Jacobson stated the informal cost survey range was between \$200 and \$400.

Chair Burt asked if the cost included the installation or simply the materials.

Ms. Jacobson noted the cost was just materials.

Council Member DuBois asked if the Motion could be for Staff to return to the Council with the Green Building Ordinance as an Action Item since there would be changes between now and then.

Chair Burt suggested the Motion be clear with the anticipated changes proposed in the language.

MINUTES

Council Member DuBois was concerned making a Motion without the proper language.

Chair Burt noted it was common to refer items to Council without prescribed language so when the full Council reviewed it more scrutinized language could be formed.

Council Member DuBois asked whether the item would go on Consent or Action.

Chair Burt stated a unanimous vote from the Policy & Services Committee would place the item on the Consent Calendar unless there was a determination the item was significant enough to warrant Action discussion.

Mr. Pirnejad mentioned because the item was a modification of an existing Ordinance it would be placed under Action either way.

MOTION: Council Member Berman moved, seconded by Council Member Burt that the Policy & Services Committee refer the revised Green Building Code Ordinance to the City Council for a Public Hearing and adoption of: 1) an Ordinance repealing and restating Palo Alto Municipal Code Chapter 16.14 to adopt and amend the 2013 California Green Building Standards Code, Title 24, Chapter 11, of the California Code of Regulations and 2) an Ordinance repealing Palo Alto Municipal Code Chapters 16.17 and 16.18 and restating Chapter 16.17 to adopt and amend the 2013 California Energy Code, Title 24, Chapter 6, of the California Code of Regulations. Inclusive of the proposed revisions by GBAG and endorsed by Staff.

Chair Burt commended the Staff and the GBAG for their efforts. He appreciated Staff taking the next steps in bettering the City by setting goals that appeared to be reaches which became the next generation of standard practices.

MOTION PASSED: 4-0

Chair Burt asked about the timing on the discussion of next generation objectives.

Council Member Wolbach requested the discussion include multi-family residential and various commercial types.

Chair Burt included solar by default with exceptions and the exception process.

MINUTES

Future Meetings and Agendas

Chair Burt reviewed the items on the waiting list for Policy & Services consideration. He asked if the list captured the Colleagues Memos including those in the pipeline.

Khashayar Alaei, Senior Management Analyst, stated the only Colleagues Memos on the list were the ones Staff was aware of.

Chair Burt noted there would more than likely be other Colleagues Memos or other referrals that would be added to the present list.

Mr. Alaei stated the April 14th meeting needed to be rescheduled due to a special City Council Meeting. He noted a substitute meeting was suggested for either April 8th or 28th.

Chair Burt noted his unavailability for April 28th.

Mr. Alaei asked if April 8th was available for the Committee members.

Council Member Berman stated he was available.

Mr. Alaei mentioned Chair Burt was interested in bringing forth the recommendation from the Committee of the Whole to the Policy & Services Committee.

Council Member Berman asked when the Minimum Wage Ordinance was scheduled to be returned.

Mr. Alaei stated he would check-in with the City Attorney for their availability.

Council Member DuBois asked if there would be a single meeting for the upcoming month.

Chair Burt mentioned in order to accomplish all of the items being brought to Policy & Services there may be a series of months where there would be two meetings per month. The question was if the Committee members were available for a second meeting in April would there be items ready for discussion.

Mr. Alaei would review the list for possibilities. Depending on the outcome of the City/School meeting on April 2nd the Stanford Funds item could be available on the 28th to discuss the Project Safety Net.

MINUTES

Council Member DuBois asked how the Stanford Funds was involved with the Project Safety Net.

Chair Burt clarified the funds for Project Safety Net came out of the Stanford Development Funds.

Council Member DuBois noted his spouse worked for Stanford and asked if there might be a conflict.

Chair Burt stated the funds had been transferred from Stanford to the City therefore they were City funds.

Adjournment: Meeting was adjourned at 10:21 P.M.