



U.S. DEPARTMENT OF
ENERGY



Annual Site Sustainability Summit

Nevada National Security Site

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October 11, 2018

Realigned on October 1, 2018



Nevada Field Office

**Environmental
Management Nevada
Program**

NFO Projects

UCEP PM: Bob Bangerter*
Argus: Adam DaeGorn*
138Kv PM: Desiree Ang*

Office of the Manager
Steven J. Lawrence: Manager
Juan L. Griego: Deputy Manager

Eric J. Amarescu: Senior Nuclear Safety Advisor
Brian C. Wedl: Site Counsel
Barry L. Mellor: Senior Strategic Advisor
• Jason C. Julian: Chief of Staff
• Darwin J. Morgan: Office of Public Affairs
• Vickie Richardson: Administrative Support
Mark Walker, PhD: NGFP Fellow

AM for Mission & Infrastructure (AMMI)
Laura Tomlinson: Assistant Manager
Monica Sanchez: Deputy AM

Gerry Babero
Jerald Bond
Kevin Breen
Charlotte Carter
Tristan Dunn**
Ricky Honaker
Rhonda Hopkins
Cyle Iverson
Carolyn Kafantaris
Peter Munding
Dan Rivas
Carrie Stewart
Scott Wade
Les Winfield

AM for Safeguards & Security (AMSS)
Ray Phifer: Assistant Manager
Betty Huck: Deputy AM

Kevin Ahrens**
Susan Christian-Payne
David Digon
Hilda Hernandez
Gabrielle Lang
Nadine Remington
Chad Stuart

AM for Operations & Safety (AMOS)
Scott Wade: Assistant Manager (Acting)
John Mallin: Deputy AM
Vacant: Deputy AM

Ron Alderson	Ed Martinez
Xavier Aponte	J.P. Martinez
Brian Clifton	Mike Plinski
Jake Collens	Bill Pulse
Brian Fiscus	Jim Rachels
Kathryn Gladden	Ben Sciacca
Jeff Haeberlin	Don Seaborg
Tim Henderson	Bruce Stolte
Mary Beth Lowe	John Swientoniewski
Chudi Onowu	Chris White

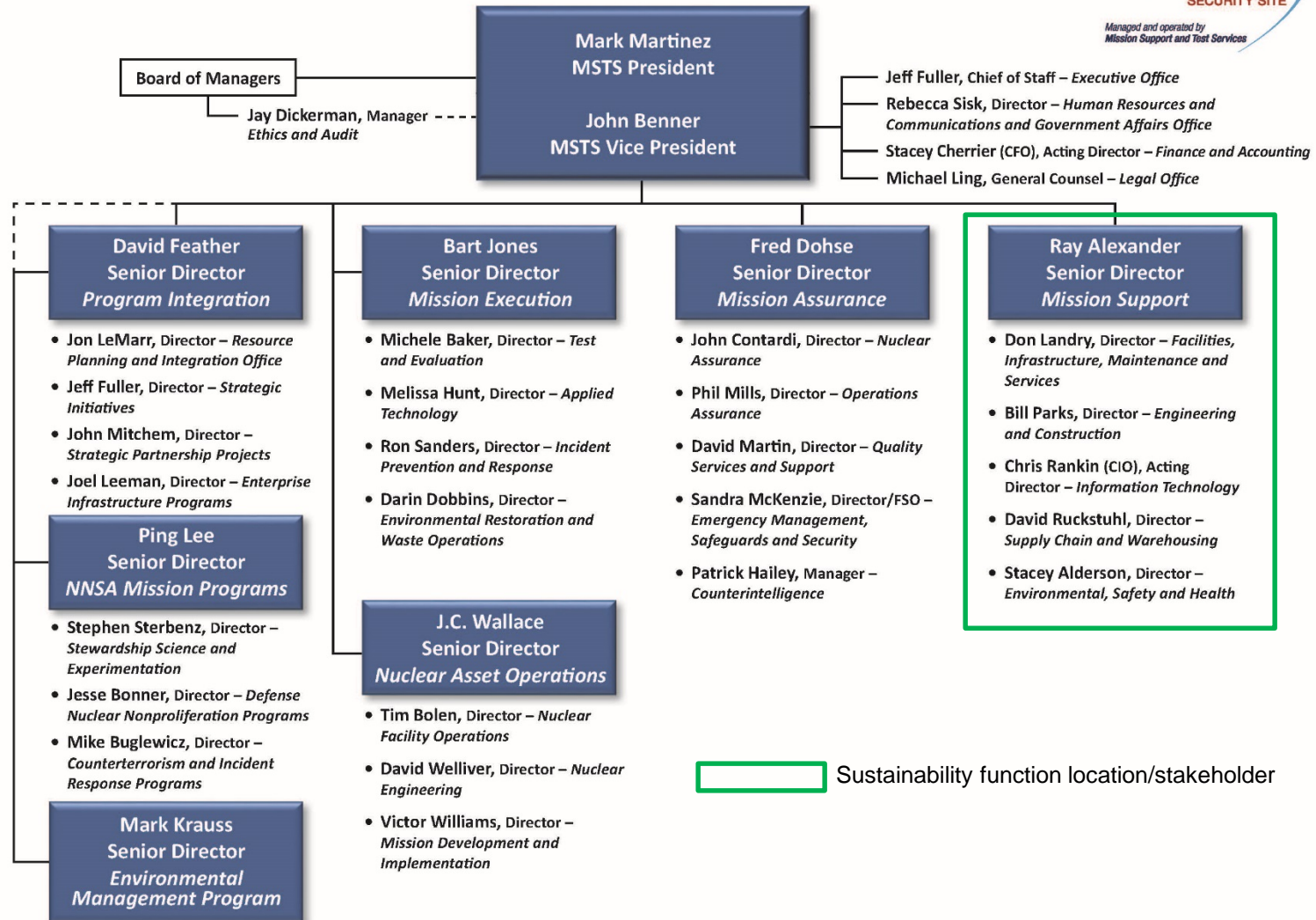
AM for Business & Contracts (AMBC)
Angela Colarusso: Assistant Manager
Denise Colwell: Deputy AM

Phillip Abbott
Jacqueline Aranda**
Jeff Berger
LaTonya Burke
Mike Collins
Darby Dieterich
Ann Howe
Lillian Minor
Elaine Thornton
Gricel Vega

* Assigned to NA-APM

** Rotational Assignment

 Sustainability Function stakeholder



Mission Support
Raymond K Alexander- Senior Director

Sustainability
Savitra M. Candley- Manager I

8.5 FTEs

REOP and Support Staff
Patrick Morris- Chief of Staff

Facilities, Infrastructure, Maintenance and
Services (FIMS)
Donald M. Landry- Director

Information Technology
Christopher R. Rankin- Director

Supply Chain and Warehousing
David V. Ruckstuhl- Director

Environmental, Safety & Health
Stacey L. Alderson- Director

Engineering and Construction
William C. Parks- Director

(refer to next page)

Sustainability stakeholder/team member

Environmental Compliance
Phyllis M. Radack- Manager I

Ecological & Environmental
Monitoring
Theodore J. Redding- Manager I

Hazardous Materials
Management
Coby P. Moke- Manager I

Engineering
Jeffrey R. Herhold- (Acting) Manager

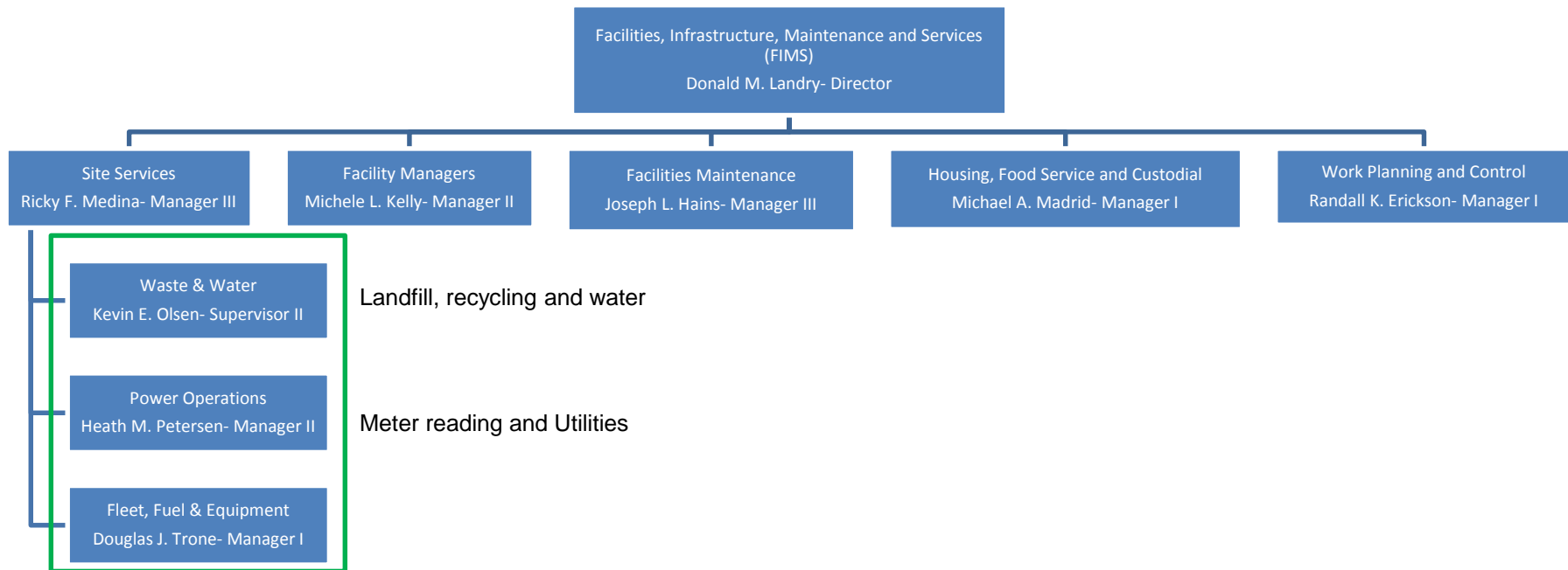
GIS
Brian M. Allen- Supervisor II


Construction
Timothy F. Austin- (Acting) Manager II

Cost Estimating
John F. Ball Jr.- Manager I

Project Management
Jeffrey C. Biagini- (Acting) Manager

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 Sustainability stakeholder/team member

Site Sustainability Progress and Plans

DOE/NNSA Goal	Target	FY17 Status	FY18 Status
Scope 1 & 2 GHG Emissions	50% reduction by FY 2025 from FY 2008 baseline	54%	
Scope 3 GHG Emissions	25% reduction by FY 2025 from FY 2008 baseline	66%	
Energy intensity (Btu per gsf) in goal subject facilities	25% reduction by FY 2025 from FY 2015 baseline (<i>new baseline yr.</i>)	2.70%	
Potable Water Intensity	36% reduction by FY 2025 from FY 2007 baseline	32%	
Sustainable Existing Buildings (EB)	17% of EB greater than 5,000 GSF comply with the Guiding Principles by FY 2025 (<i>100% compliance thereafter</i>)	68% (# of Buildings) 100% (SF)	
Renewable Energy	Renewable electric energy not less than 10% of a total agency electric consumption in FY2016-2017 working towards 30% by FY2025	N/A	
Fleet Petroleum	20% reduction by FY2015 from FY 2005 baseline (maintain 20% reduction thereafter)	0%	

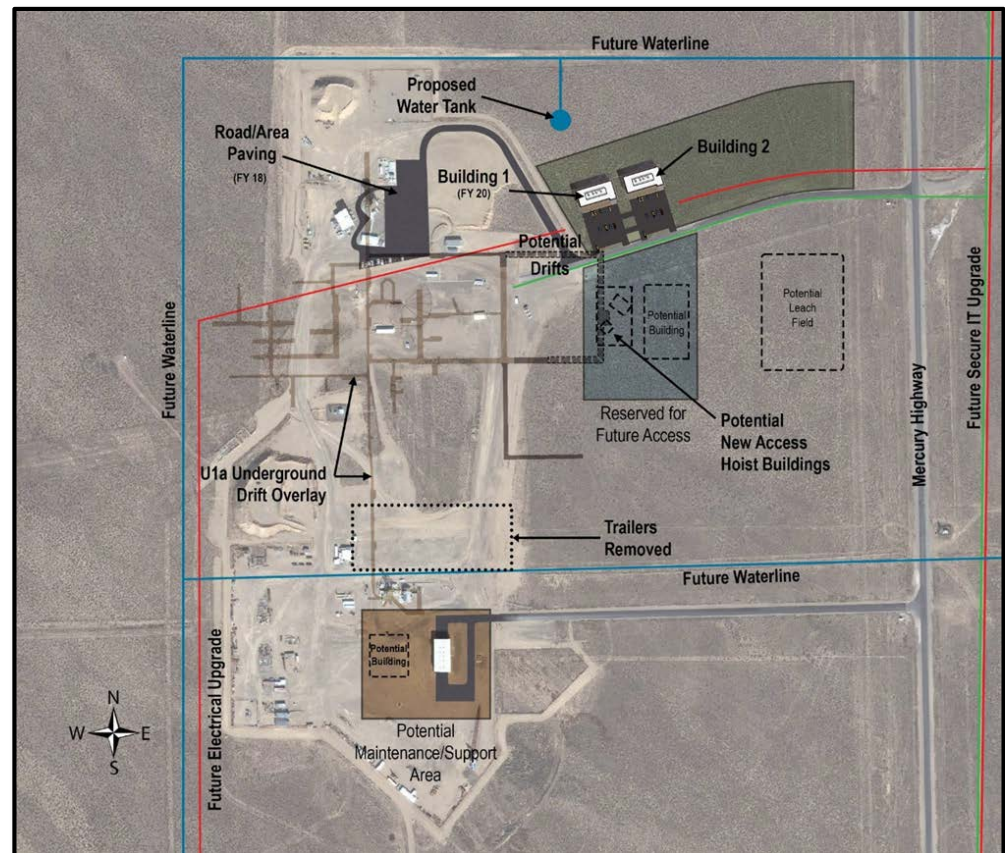
Blue= Above Expectations, **Green**= Meets expectations/on-track, **Yellow**= Below Expectations (not on track, but a plan), **Red**= Below Expectations (no recovery)

NFO Utility Status for FY 2018 (estimate-missing data)			
Commodity	FY17	FY18	Unit
Electricity	53,866	60,087	mWh
Natural Gas	106,158	108,879	Therms
Building Fuel	99,203	61,906	kgals
Potable Water	140,040,619	118,883,800	gals
Non-Potable Water	43,897,500	27,051,100	gals

- **Highlight goals where the site is at medium or high risk of goal non-attainment.**
 - **Energy Intensity-** Hurting: FY15 baseline reset was during low activity level at the site. To achieve additional reduction will be challenging
 - Key sustainability need- More funding for energy projects that impact energy reduction on “covered” facilities and an ESPC
 - **Renewable Energy-** Hurting: No large renewable projects scheduled
 - Key sustainability need- Funding/Assistance in the installation of a large renewable project or an ESPC
 - **Metering-** Hurting: Prioritization of funding for meter installations against other mission priorities
 - Key sustainability needs- Dedicated meter installation funding (“*you cannot manage what you cannot measure*”)
 - **Waste Diversion-** Hurting: Minimal number of recycle centers, user education and policy updating/enforcement
 - Key sustainability needs- Senior management support for adding more recycle centers, policy enforcement and improved data collection methodology

- **U1a Surface Planning–**
 - Program changes are occurring and increasing
 - Probable impact to sustainability goals- energy and water
 - A Conceptual Vision for the U1a Surface Complex Infrastructure is in progress.
Vision includes:

- Utilizing an A&E firm to help develop surface plan
- Establishing development zones for new buildings, underground access, and support areas
- Consolidating into new buildings and removing existing trailers
- Identifying areas for expansion, as needed
- Locating new shaft



- **High Performance Sustainable Building progress:**
 - Current Status (number of Buildings)- 13 (11%)
 - Current Status (GSF)- 441,385 GSF (17%)
 - FY18 HPSB certification target- Two (2) Buildings
 - 23-163 (10,897 GSF)- Pending Documentation Submittal
 - NLV, A-13 (37,278 GSF)- Issues found during certification activity
 - *Action plan developed and being implemented*
- **Barriers for HPSB progress-**
 - Water meter requirement
 - Increase in cost to conduct remaining HPSB certification activities
- **Opportunities-**
 - Construction of new facilities
 - Relocation and Facility Disposal



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23-163

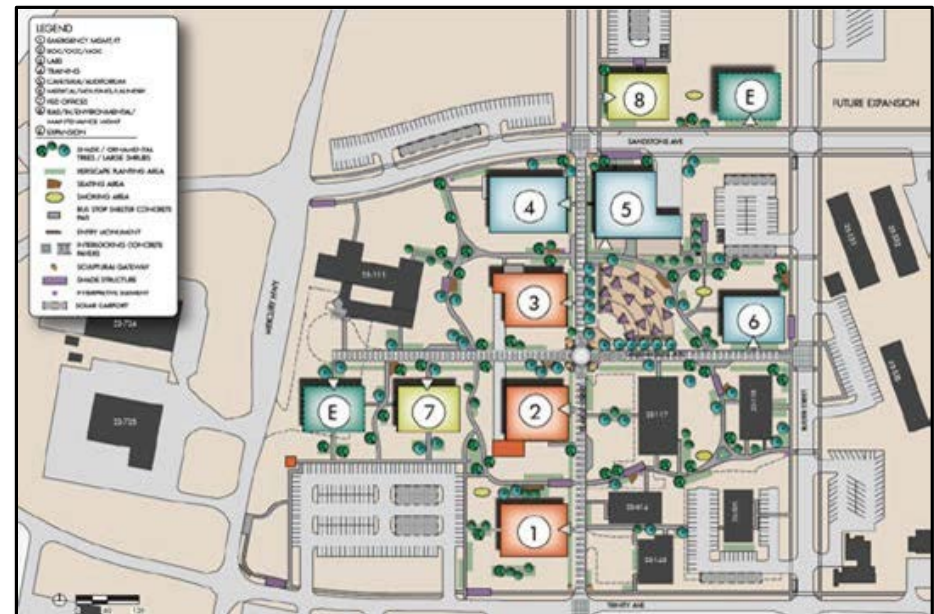


NLV

- Highlight new construction (line items and GPPs) for FYs 2019-2023.

FY19-FY24 GPP Construction NEW Buildings in FIMS AAIM Module			
Area	No.	Usage Code	GSF
Mercury	4	Office	Ea, >12,000
	1	Cafeteria	30,000
U1a	1	Computation Lab	560
	2	Office	Ea. 13,000
Area 6 DC	1	Switching Station	560
DAF	1	Office	10,000

- Potential for net zero buildings (energy, water, and/or waste.)
 - Mercury Fire Station #1 PV Project construction completed in FY18
 - NNSS First Net zero energy facility
 - Building #1 Mercury Modernization, 23-460
 - Potentially the 2nd Net zero energy facility at the NNSS



- Identify any site issues with:
 - Waste diversion/Recycling/Sustainable Materials acquisition
 - Has consistently been a challenge for the NNS
 - Areas to target for action began in FY17:
 - Added cardboard collection areas at high use facilities
 - Conducted a plastic bag pilot in FY18 (*reviewing data*)
 - Reviewed the number of recycle pickup locations
 - Researched options to decrease cost of recycle pickup
 - Researched Battery recycling options (*found an out of state vendor*)
 - Identified policies that require updating for the handling of construction waste
 - Searched for a local E-Waste company (*attended 2018 Earth Day event*)
- Does your site want additional Sustainable Acquisition training?
 - *Yes. Interested in Sustainable Acquisition process for data tracking and success stories across the NSE complex*





- **Successes:**

- **Completion of the Solar PV Demonstration project at the Mercury Fire Station as the first Net Zero Energy facility at the NNSA**
- **NNSA Fleet, Fuel and Equipment services received three (3) awards:**
 - North American Fleet Association (NAFA's) FLEXY award winner- Excellence in Fleet Sustainability (Public)
 - Outstanding Sustainability Program/Project from DOE
 - 2018 NNSA Outstanding Sustainability Program- Small Site Winner





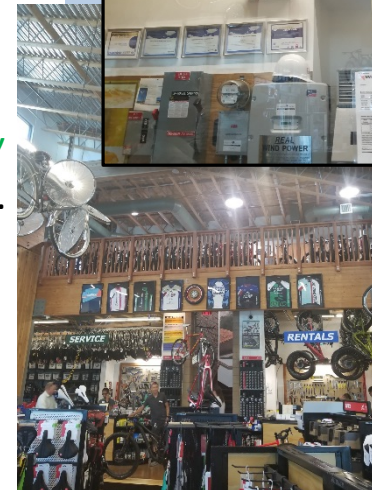
- **Opportunities:**
 - **As the Strategic Plan for NNSS is matured, Sustainability is being incorporated**
 - **Solar Power, as it is becoming more affordable**
 - BLM request for information is being addressed for large solar project
- **Top three challenges at your site to implementing sustainability:**
 1. Forward area strategic plan still developing and keeping Sustainability an objective is a challenge
 2. Identification of dedicated Sustainability Projects that complement the NNSS Strategic Plan
 - a) Sustainability is a key objective on current projects (e.g., Building 1 of Mercury Modernization)
 3. Project Development/Planning process identification of sustainable elements (e.g., energy savings, cost savings, etc.) associated with a project
 - a) How to make sure the sustainability elements in projects are adequately highlighted
- **Do you have any training needs (i.e., technical, awareness, outreach, other)?**
 - **PPA and UESC Training**

Other funding for sustainability

- Sustainability Program is funded from Indirect Funds under the Mission Support Directorate
- Functional Transformational Initiative was conducted in FY18 to identify potential shifts of various sustainability actions/tasks to Direct Funds
 - In progress

Integration

- Integration Success stories with other teams:
 - Developed a comprehensive electric and water meter prioritization plan with *MSTS Power Operations Department and the Waste and Water Department*
 - Coordinated the April 2018 Earth Day event with *MSTS Health and Productivity Department* for a 2nd year
 - Worked with *NNSA Office of Environment & Sustainability* on an option for a NNSA-wide approach to scoping ESPCs.
 - Assisted with the local *Nevada Chapter for International Facility Management Association (IFMA)* with coordinating LEED facility tours and training officially recognized by GSA as being aligned with the the Federal Buildings Personnel Training Act (FBPTA).



- **Who is your federal point of contact?**
 - Federal point of contact- **TBD**
 - New Reorganization of the Nevada Field Office on 10/1/18
- **When do your utility contracts expire:**
 - Electricity- NNSS (expires in 10/2022)
 - Natural Gas- No expiration
 - Water- No expiration
- **Do you have any utilities successes or concerns?**
 - None at this time

Questions?