County of Los Alamos

Agenda - Final

Board of Public Utilities

Carrie Walker, Chair; Jeff Johnson, Vice-chair; Stephen McLin,
Kathleen Taylor and Steve Tobin Members
Philo Shelton, Ex Officio Member
Harry Burgess, Ex Officio Member
Pete Sheehey, Council Liaison

Wednesday, October 2, 2019	**5:30 PM**	**1000 Central Avenue** **Council Chambers**

SPECAL SESSION

Complete Board of Public Utilities agenda packets, past agendas, videos, legislation and minutes can be found online at losalamos.legistar.com. Learn more about the Board of Public Utilities at rebrand.ly/LACBPU.

PUBLIC COMMENTS:

Please submit written comments to the Board at bpu@lacnm.us. Oral public comment is accepted during the two periods identified on the agenda and after initial board discussion on a business item, prior to accepting a main motion on an item. Oral comments should be limited to four minutes per person. Requests to make comments exceeding four minutes should be submitted to the Board in writing prior to the meeting. Individuals representing or making a combined statement for a large group may be allowed additional time at the discretion of the Board. Those making comments are encouraged to submit them in writing either during or after the meeting to be included in the minutes as attachments. Otherwise, oral public comments will be summarized in the minutes to give a brief succinct account of the overall substance of the person's comments.

1.   CALL TO ORDER

2.   PUBLIC COMMENT

> *This section of the agenda is reserved for comments from the public on Consent Agenda items or items that are not otherwise included in this agenda.*

3.   APPROVAL OF AGENDA

4.   BUSINESS

4.A   12264-19   Strategic Planning for the Department of Public Utilities

> ***Presenters:***   Philo Shelton, Utilities Manager

> *PG. 1 - 79*

5.   PUBLIC COMMENT

> *This section of the agenda is reserved for comments from the public on any items.*

6.   ADJOURNMENT

If you are an individual with a disability who is in need of a reader, amplifier, qualified sign language interpreter, or any other form of auxiliary aid or service to attend or participate in the hearing or meeting, please contact the County Human Resources Division at 662-8040 at least one week prior to the meeting or as soon as possible. Public documents, including the agenda and minutes can be provided in various accessible formats. Please contact the personnel in the Department of Public Utilities (505) 662-8132 if a summary or other type of accessible format is needed.

Agenda No.:	4.A
Index (Council Goals):	* 2019 Council Goal - Planning for Appropriate Levels of County Services
Presenters:	Philo Shelton, Utilities Manager
Legislative File:	**12264-19**

Title
Strategic Planning for the Department of Public Utilities
Recommended Action
Review DPU's Mission, Vision, Values and 2020 Strategic Plan and provide direction to Staff for preparing 2021 Strategic Plan for BPU's consideration on October 16, 2020.
Staff Recommendation
None
Body
The Utilities Manager is expected to annually develop strategic objectives and long-term goals and present them to the Board for approval. The Utilities Manager has scheduled a meeting on October 10th for staff to begin strategic planning for fiscal year 2021. Staff plans to return to the Board at the October 16th regular meeting to present and request approval of any proposed revisions to to the Mission, Vision, Values, strategic objectives, and long-term goals. Prior to that, staff would like Board input to incorporate into planning efforts to ensure alignment of focus areas, strategic objectives and goals with Board and County priorities.

A consultant from Human Strategies, LLC will be present to facilitate the meeting and gather feedback. The consultant will also include a presentation on how the Department's community input processes and key systems for continuous improvement, which are based on Baldrige principals for performance excellence, guide strategic planning.
Alternatives
The Board could choose to provide input or conduct strategic planning in a different way.
Fiscal and Staff Impact
None
Attachments
A - Current BPU Approved Strategic Objectives & Goals
B - Meeting Schedule and Outline
C - Human Strategies, LLC PowerPoint Presentation
D - DPU's Quality New Mexico Zia Application
E - County Strategic Leadership Plan

FOCUS AREA - OPERATIONS & PERFORMANCE

GOAL - 1.0 Provide safe and reliable utility services.

1.1 OBJECTIVE - WATER (WP/NP/DW) - Efficiently deliver safe and reliable water utility services.

1.2 OBJECTIVE - GAS - Efficiently deliver safe and reliable gas utility services.

1.3 OBJECTIVE - SEWER (WC & WT) - Efficiently deliver safe and reliable sewer utility services.

1.4 OBJECTIVE - ELECTRIC (EP) - Efficiently deliver safe and reliable electric production utility services.

1.5 OBJECTIVE - ELECTRIC (ED) - Efficiently deliver safe and reliable electric distribution utility services.

1.6 OBJECTIVE - BUSINESS SYSTEMS - Efficiently implement and maintain secure and reliable business systems.

1.7 OBJECTIVE - Utility control and mapping systems and processes are accurate, safe and secure.

1.8 OBJECTIVE - Develop a culture of continuous improvement.

FOCUS AREA - FINANCIAL PERFORMANCE

GOAL - 2.0 Achieve and maintain excellence in financial performance.

2.1 OBJECTIVE - Utilize revenues to provide a high-level of service while keeping rates competitive with similar utilities.

2.2 OBJECTIVE - Conduct cost of service studies for each utility at least every 5 years.

2.3 OBJECTIVE - Meet financial plan targets by 2025.

2.4 OBJECTIVE – Achieve workplans while operating within budget.

FOCUS AREA - CUSTOMERS & COMMUNITY

GOAL - 3.0 Be a customer service oriented organization that is communicative, efficient, and transparent.

3.1 OBJECTIVE - Customer service processes and systems are efficient and user-friendly.

3.2 OBJECTIVE - Stakeholders are engaged in and informed about Utilities operations affecting the community.

FOCUS AREA - WORKFORCE

GOAL - 4.0 Sustain a capable, satisfied, engaged, ethical and safe workforce focused on customer service.

4.1 OBJECTIVE - Leaders invest in employee training and professional development.

4.2 OBJECTIVE - Employees promote a culture of safe and ethical behavior.

4.3 OBJECTIVE - Employees are engaged, satisfied and fairly compensated.

FOCUS AREA - ENVIRONMENTAL SUSTAINABILITY

GOAL - 5.0 Achieve environmental sustainability.

5.1 OBJECTIVE - ELECTRIC (EP & ED) Be a carbon neutral electric provider by 2040.

5.2 OBJECTIVE - ELECTRIC (ED) - Electrical efficiency is promoted through targeted energy conservation programs.

5.3 OBJECTIVE - WATER (DW) – Gallons per capita per day (GPCD) potable water use is reduced by 9% by 2030.

5.4 OBJECTIVE - GAS – Customer heating efficiency is improved to reduce gas usage by 3% by 2030.

5.5 OBJECTIVE - SEWER (WT) - Class 1A effluent water is provided in White Rock.

FOCUS AREA - PARTNERSHIPS

GOAL - 6.0 Develop and strengthen partnerships with stakeholders.

6.1 OBJECTIVE - Communicate with stakeholders to strengthen existing partnerships and identify new potential mutually beneficial partnering opportunities.

(Last Revised 09/20/2018)

0. Introduction	Philo/Dawn	5:30

- Welcome
- Ground Rules
- Objectives
  1) Introduction to DPU Key Systems
  2) Affirm/Revise mission, vision, values
  3) Preview FY2021 Focus Areas and Goals
  4) Community Input Processes and Changes
  5) Meeting Evaluation

1. Introduction to Key Systems	Dawn	6:00

These key systems (and others) were defined and used in the 5-year management audit recently completed

Leadership	Comparative Data Selection
Governance	Data, Information & Knowledge Quality
Strategic Planning	Performance Process Design Management

2. Board Review of Mission/Vision/Values	Board	6:45

Review existing
o What would you delete?
o What would you change?

3. Preview FY2021 Focus Areas and Goals	Board	7:00

- Review current Focus Areas, Goals and Results
- Suggest changes
- Multivote on BPU priorities

4. Community Input Processes and Changes	Julie/Dawn	7:35

- Current Processes
- Should committees be formed to provide input to the Board?
- Should interns be tasked with researching specific topics/initiatives (similar to recent intern presentation on pumped hydro storage)?

5. Meeting Evaluation	Dawn	8:00

- Plus Delta
  o What did you LIKE about tonight's meeting?
  o What would you CHANGE?

BPU Meeting

Human Strategies, LLC

Oct 2, 2019

Human Strategies, LLC

- **Who are we?** We are a veteran and woman-owned, New Mexico small business dedicated to improving quality of life in the communities we touch
- **Our Vision:** A better world through better organizations

Workshop Ground Rules

- Be an angel's advocate
- Free and open discussion
- There are no bad ideas
- Practice active listening
- Commit to agenda boundaries
- Practice laser messages

What is a laser message?

- Clear, concise, focused
- Requires thinking before speaking
- Non-repetitive
- As told on a 3-story elevator ride
- 60 seconds or less

Agenda

1. Introduction to DPU Key Systems

2. Affirm/Revise mission, vision, values

3. Preview FY2021 Focus Areas and Goals

4. Review community input processes and future actions

1. Introduction to DPU Key Systems

What should you do with these systems models?

Communicate to new and all employees

- Embed in new employee orientation
- Managers present to employees
- All-Hands

Improve sales, marketing, branding

- Place on website as appropriate

Developing relationships with partners and other stakeholders

- Use in key accounts meetings
- Use in communicating to County Council, customers, etc.

Key Systems Review

- PP I-V Intro to Profile
- P1: Leadership System
- P4: Governance System
- P6: Strategic Planning System
- PP8-9: Focus areas, goals, obj.
- P15: Performance Measurement
- P16: Comparative Data Selection
- P17: Performance Analysis

- P19: Data Quality System
- P21: Organizational Learning
- P25: Workforce Engagement
- P29: Process Design
- P32: Innovation Management

2. Affirm/Revise mission, vision, values
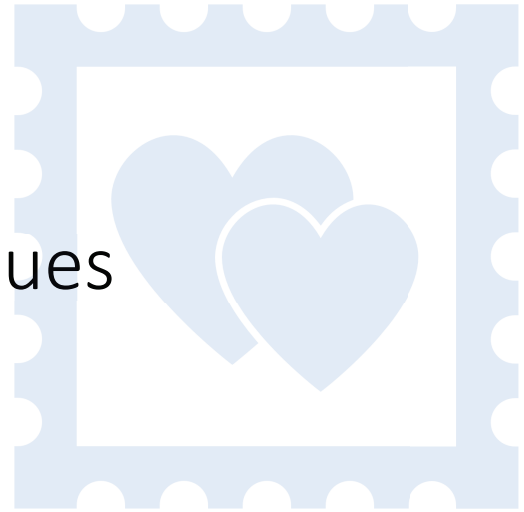
Mission Vision Values

- **Mission**
  - Provide safe & reliable utility services in an economically & environmentally sustainable fashion
- **Vision**
  - Be a high performing utility matched to our community, contributing to its future with diversified & innovative utility solutions

We Value:

- **Customers** by being service oriented & fiscally responsible
- **Employees and partners** by being safe, ethical & professional organization that encourages continuous learning
- **Natural resources** through innovation & progressive solutions
- **Community** by being communicative, organized & transparent

3. Preview FY2021 Focus Areas and Goals

DPU Focus Areas and Baldrige Results

DPU

1. Operations & Performance
2. Financial Performance
3. Customer & Community
4. Workforce
5. Environmental Sustainability
6. Partnerships

Baldrige Results Areas

1. Product & Process
2. Financial, Market & Strategy
3. Customer Engagement
4. Workforce
5. Leadership, Governance & Societal

Focus Areas and Goals Review and Priority

- What would you change?
- What would you add?

- Multivote on Objectives using n/3 rules
  - You have 8 votes to indicate which objectives you feel should be high priority
  - You can split your 8 votes any way that you choose
    - Vote once for 8 objectives
    - Put all 8 votes on one objective
    - Anything else in between!

4. Review community input processes and future actions

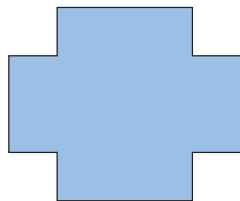**Key System: Customer Communication System**

P11: Figure 3.1-2 shows the many ways DPU listens, interacts, & observes all customer segments:

- Residential
- Commercial
- Large
- Former
- Potential

Also a variety of data types:

- Product
- Customer service
- Transaction based

5. Plus/Delta

Plus: state what you liked about today

Delta: state what you would change about today
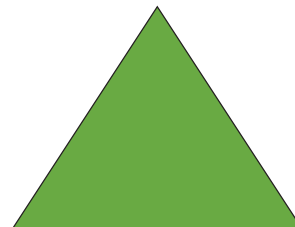
LOS ALAMOS
Department of Public Utilities

Electric, Natural Gas, Water and Wasterwater Services

2019 Zia Application - Level 4
New Mexico Performance Excellence Assessments & Awards Program

photo: Vint Miller 2017

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Table of Contents

Acronym Glossary

A

A	Accurate
ACE	Army Corp of Engineers
ACS	Annual Comparison Summary
AGA	American Gas Association
AMI	Advanced Metering Infrastructure (Includes Smart Meters)
AMT	Asset Management Team
AOS	Available on Site Visit
AP	Action Plan
API	American Petroleum Institute
APGA	American Public Gas Association
APPA	American Public Power Association
ASAI	Average System Availability Index: Measures electricity distribution - average system availability per unit is calculated as service hours available divided by customer demand hours
AWWA	American Water Works Association
AV	Antivirus

B

BAR	Baldrige Award Recipients
B&C	Board & County Council
BOR	US Bureau of Reclamation
BPU	Board of Public Utilities

C

C	Complete
CAFR	Comprehensive Annual Financial Report
CAIDI	Customer Average Interruption Duration Index: Measures electricity distribution - average interruption (outage) duration is calculated as the sum of all customer outage durations divided by the total number of customer interruptions
CC	Core Competency
CCA	Core Competency: Accountability
CCC	Customer Care Center
CCE	Core Competency: Employees
CCR	Core Competency: Relationships
CCS	Core Competency: Sustainability

CI	Conflict of Interest
CIP	Capital Improvement Plan
COOP	Continuity of Operations Plan
CPA	Certified Public Accountant
CPS	Clear Point System

D

DG	Distributed Generation
DMZ	Demilitarized Zone
DOE	Department of Energy
DOT	Department of Transportation
DPU	Los Alamos Department of Public Utilities

E

EAP	Emergency Action Plan
EATP	Enterprise Awareness Training Program
EAF	Equivalent Availability Factor
ECA	Electric Coordination Agreement (with DOE)
ED	Electric Distribution
ENG	Engineering
EOP	Emergency Operations Plan
EP	Electric Production
EPA	Environmental Protection Agency
ERP	Enterprise Resource Planning
EV	Electric Vehicle

F

F	Findings
F	Former
F&A	Finance and Administration
FC	Field Crew
FD	Fire Department
FER	Future Energy Resources
FERC	Federal Energy Regulatory Commission
Fig	Figure
FTE	Full Time Employee
FY	Fiscal Year

G

GAAP	Generally Accepted Accounting Principles

GAS	Governmental Auditing Standards		MM	Middle Management
GD	Gas Distribution		MW	Megawatt
GFOA	Gov. Finance Officers Assoc.of US and Canada		MS-ISAC	Multi-State Information Sharing & Analysis Center
GIS	Geographical Information System		MUNIS	ERP for municipalities
GPCD	Gallons Per Capita Per Day		MVV	Mission, Vision, Values
GWS	Gas, Water, Sewer		MWh	Megawatt Hour

H

HR — Human Resources

I

I — Interacting
ID — Identify
IP — Internet Provider
IRP — Integrated Resource Plan
IPS — Intrusion Prevention System
IT — Information Technology

J

K

KM — Key Measure
KPM — Key Performance Measure
KWP — Key Work Process

L

L — Listen
LA — Los Alamos
LAC — Los Alamos County
LACDC — Los Alamos Commerce & Development Corporation
LACED — LAC Economic Development
LAMC — Los Alamos Medical Center
LANL — Los Alamos National Laboratory
LAPS — Los Alamos Public School
LITMOS — Cloud based learning management software
LIO — Listening, Interacting, Observing
LS — Leadership System
LT — Long Term, as in time

M

MG — Million Gallons
mi. — Miles

N

NASSCO — National Association of Sewer Services Companies
NERC — North American Electric Reliability Corporation
NESC — National Electric Safety Code
NIST — National Institute of Standards and Technology
NM — New Mexico
NMED — NM Environment Department
NMMEAA — NM Municipal Energy Acquisition Authority
NMOMA — NM Open Meetings Act
NMOSA — NM Office of the State Auditor
NMOSE — NM Office of State Engineer
NMPRC — NM Public Regulation Commission
NMS — Non-Management Staff
NP — Non-Potable, as in water
NPS — Net Promoter Score
NV — No Violations

O

O — Observing
O&M — Operations and Maintenance
OSHA — Occupational Safety and Health Administration
OPRC — Operating Procedure Review Committee

P

P — Potential
PACP — Pipeline Assessment Certification Program
PDSA — Plan Do Study Act
PAP — Project Administrative Procedures
PEEC — Pajarito Environmental Education Center
PHMSA — Pipeline & Hazardous Materials Safety Administration
PPA — Performance Planning and Appraisal

PPE	Personal Protective Equipment		SPP	Strategic Planning Process
PR	Public Relations		ST	Short Term, as in timeline
PRV	Pressure Regulating Valve		SWOT	Strengths Weaknesses Opportunities Threats
PS	Partners and Suppliers			

PPE	Personal Protective Equipment
PR	Public Relations
PRV	Pressure Regulating Valve
PS	Partners and Suppliers
PSB	Pipeline Safety Bureau
PUP	Prudent Utility Practice
PV	Photovoltaic (solar)
PWV	Present Worth Value

Q

QSC	Quarterly Safety Committee

R

RFP	Request for Proposal
RFQ	Request for Quote

S

SA	Strategic Advantage
SAIDI	System Average Interruption Duration Index: Measures electricity distribution - average interruption (outage) time if all customers were out at the same time (hours per year) is calculated as the sum of all customer outage durations divided by total number of customers served
SAIFI	System Average Interruption Frequency Index: Measures electricity distribution - average nterruptions (outages) per year is calculated as the total number of customer interruptions divided by the total number of customers served
SANS	Institute for informational security training and security certification.
SC	Strategic Challenge
SCADA	Supervisory Control and Data Acquisition
SCV	Safety Culture Vision
SH	Stakeholder
SIR	Severe Injuryt Report
SL	Senior Leader
SM	Social Media
SME	Subject Matter Expert
SMT	Senior Management Team
SMR	Small Modular Reactor
SO	Strategic Objective
SOP	Standard Operating Procedures
SP	Strategic Plan

SPP	Strategic Planning Process
ST	Short Term, as in timeline
SWOT	Strengths Weaknesses Opportunities Threats

T

T	On-Time
Tr	Trailhead

U

U	Competitor Utility
UAMPS	Utah Associated Municipal Power Systems
UM	Utilities Manager
URL	Uniform Resource Locator
USDOT	US Department of Transportation

V

V	Values
V	Violation
V	Vision
VC	Value Customers
VE	Value Employees
VNR	Value Natural Resources
VS	Value Community
VOC	Voice of the Customer
VPN	Virtual Private Network

W

WC	Wastewater Collection (Sewer)
WD	Water Distribution
WECC	Western Electricity Coordinating Council
WF	Workforce
WP	Water Production
WR	White Rock
WW	Wastewater (Sewer)
WT	Wastewater Treatment
WWTP	Wastewater Treatment Plant

X

Y

Z

Organization Chart

LOS ALAMOS
Department of Public Utilities
Electric, Gas, Water, and Wastewater Services

DEPARTMENT ORGANIZATIONAL CHART

As of July 2, 2019

Board of Public Utilities (5)

Utilities Manager

Executive Assistant

Public Relations Manager

Deputy Utilities Manager – Gas, Water, Sewer (GWS)

- Superintendent (WP) (1)
  - Water System Supervisor (1)
  - Senior Water Sys. Operator (4)
  - Water Systems Apprentice I (1)
  - Water Sys. Electrical Tech. (2)
- Superintendent (WWTP) (1)
  - WWTP Supervisor (1)
    - Senior WWTP Operator (2)
    - Apprentice I (1)
    - Trainee (3)
- Superintendent (GWS) (1)
  - *Shop Supervisor (1)
    - Senior Pipefitter (4)
    - Pipefitter (2)
    - Apprentice II (5)
    - Apprentice I (1)
    - Trainee (3)
  - *Field Supervisor (1)
  - Meter Reader Supervisor (1)
    - Apprentice I (1)
    - Trainee (3)

*The Field and Shop Supervisors share supervisory duties equally.

Deputy Utilities Manager – Finance & Administration

- Management Analyst (1)
- Senior Billing & Service Spec. (2)
- Billing & Service Spec. (1)
- Sen. Manag. Analyst (1)
- Billing & Service Spec. (2)
- Senior Office Specialist (1)
- Business Operations Manager (1)
- Management Analyst (1)

Deputy Utilities Manager – Engineering

- Senior Engineer (1)
- Engineering Project Manager (3)
- Engineering Associate (1)
- GIS System Specialist (1)
- SCADA System Spec (1)
- SCADA System Tech (1)
- Engineering Associate (1)

Deputy Utilities Manager – Power Supply

- Electrical Eng. Manager (1)
  - Lineman Supervisor – UG Maint. (1)
    - Journeyman Lineman (2)
  - Lineman Supervisor – OH Maint. (1)
    - Journeyman Lineman (2)
  - Lineman Supervisor – UG Const. (1)
    - Journeyman Lineman (3)
  - Engineering Associate (1)
- Power System Supervisor (1)
- Senior Power System Operator (4)
- Power System Operator (2)
- Engineering Associate (1)
- H-E Plant Engineer (1)
- H-E Maint. Tech. Apprentice (2)

P: Organizational Profile
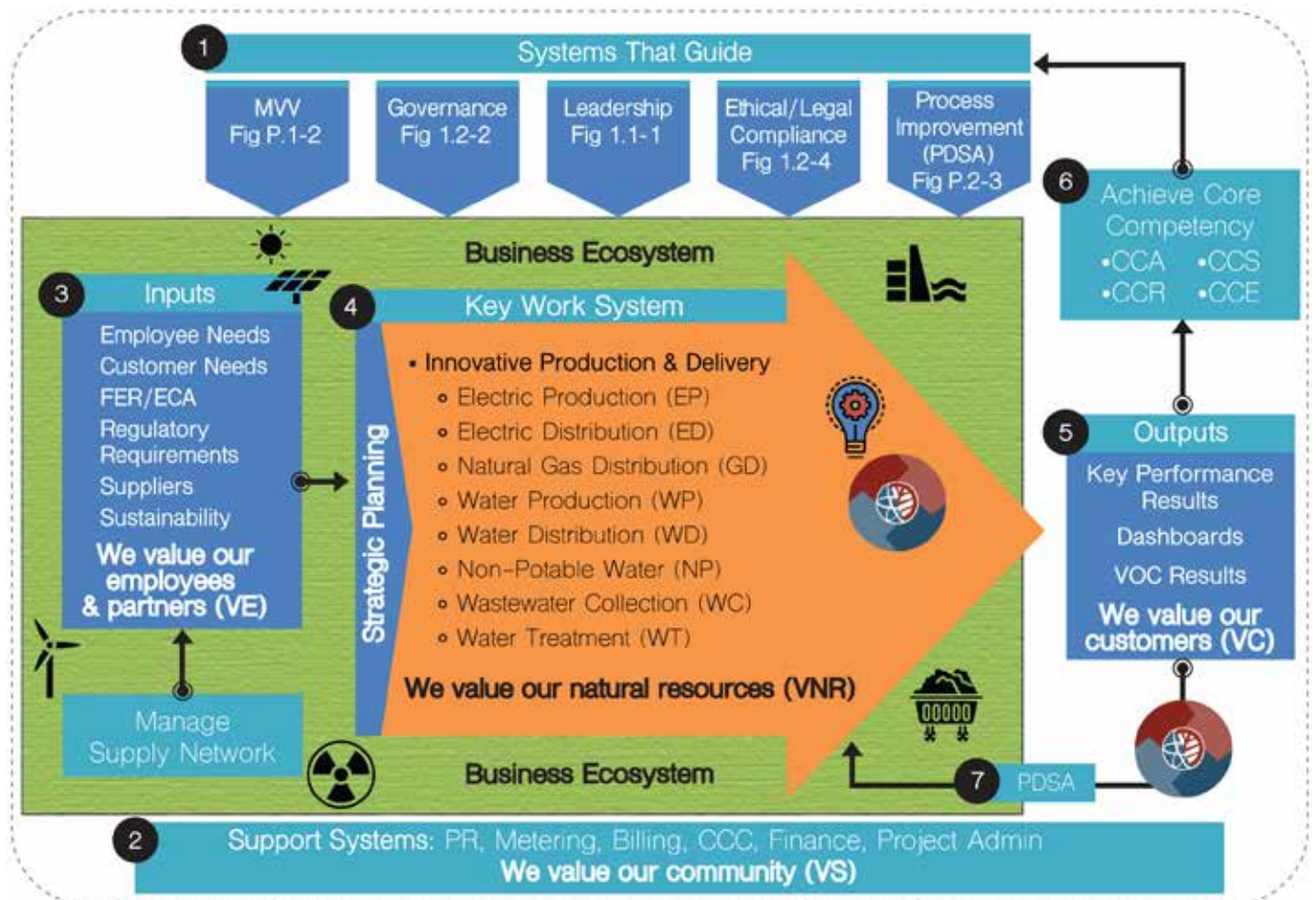
Figure P.1-0 *The DPU Enterprise System Model enables us to execute our chartered mission*

To ensure all aspects of our business are addressed systematically, we have an Enterprise System Model (**Figure P.1-0**) which includes the elements critical to our ability to execute our chartered mission.

P.1 Organizational Description
Los Alamos County (LAC) Department of Public Utilities (DPU) is part of the county government formed 51 years ago. Los Alamos was created by the establishment of Los Alamos National Laboratory (LANL) during World War II. The smallest county in New Mexico, LAC was administered by the US government during the Manhattan Project, but now has equal status to NM's other counties. The county has two population centers: Los Alamos and White Rock. LAC is located on four mesas of Pajarito Plateau, which creates unusual challenges for DPU. With an altitude of 7,320 feet, LAC has higher than normal number of lightning strikes, is forested with ponderosa pines, and has an abundance of wildlife (rodents, birds, reptiles) which impact operations and maintenance of all utilities.

The complexity and vulnerability of the utility was never more evident than during the 2000 Cerro Grande fire, when 400 Los Alamos homes burned to the ground. There was plenty of water available, but the distribution system was not equipped to transfer it to where it was needed. Further, burned electric lines caused shutdown of booster stations that refill water tanks. After the fire, using PDSA, DPU used federal grants to add a 7.75 million-gallon storage tank, replace undersized water lines, install cross-connects to transfer and backfeed water as needed, and replace burned overhead electric lines with underground lines. Lastly, a 350-kilowatt generator capable of powering any pump station now backs up electric lines. During the seven years after the fire, DPU installed over $30 million of systems upgrades and improvements.

P.1a Organizational Environment
P.1a1 Product Offerings Our main product offerings are shown in **Figure P.1-1**. These core services are equally

Product	% Rev.	Delivery Mechanisms
Electric Production (EP)	72%	Hydroelectric facilities, coal-fired plants, PV panels, ECA
Electric Distribution (ED)		Substations, lines, meters, poles, transformers, CCC, EV stations
Natural Gas Distribution (GD)	7%	Service installation, metering, CCC
Water Production (WP)	12%	Wells, pumps, storage
Water Distribution (WD)		Pumps, lines, meters, CCC
Non-Potable Water (NP)		Pumps, lines, tanks
WW Collection (WC)	9%	CCC, pipes, lift stations
WW Treatment (WT)		Composting, treatment facilities

Figure P.1-1 *DPU is a customer-oriented municipal utility serving residents, businesses and LANL*

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important to our customers and stakeholders. DPU builds and maintains utility infrastructure to ensure delivery of all products.

P.1a2 Mission, Vision, and Values (MVV) DPU's purpose is to provide the utilities that County citizens, businesses and LANL rely upon. MVV, shown in **Figure P.1-2**, are changed/affirmed annually during strategic planning (SP).

Mission & Vision
Mission: Provide safe & reliable utility services in an economically & environmentally sustainable fashion
Vision: Be a high performing utility matched to our community, contributing to its future with diversified & innovative utility solutions
We Value:
Our customers by being service oriented & fiscally responsible (VC)
Our employees & partners by being a safe, ethical & professional organization that encourages continuous learning (VE)
Our natural resources through innovative & progressive solutions (VNR)
Our community by being communicative, organized & transparent (VS)

Core Competencies/Integration	
Accountable Management (CCA)	Supports mission to provide economic services
SP for Sustainability (CCS)	Supports vision to explore diversified & innovative solutions
Building Customer & Partner Relations (CCR)	Supports customer, partner & community values
Employee Development (CCE)	Supports employee value

Figure P.1-2 *For the past 10 years MVV has driven our strategic planning, leadership & performance improvement*

Other characteristics of our culture are reflected in the Code of Ethics (**Figure 1.2-5**) and Safety Culture Vision (**Figure 6.2-1**).

P.1a3 Workforce Profile DPU's workforce (WF) consists of 94 full time employees. WF profile:
• Gender: 84% male; 16% female
• Ethnicity: 68% Hispanic; 29% Caucasian; 3% American Indian
• Education: 74% high school; 5% associate, 15% bachelor and 6% masters degrees
Forty-one employees are union members in either International Brotherhood of Electrical Workers or United Association of Plumbers and Pipefitters.

Due to the inherently dangerous nature of utilities work, health monitoring and safety training are an integral part of DPU

Key Elements	M	V	Figure
Having materials/equip to work	●	VE	7.3-2
Opportunity to do what I do best	●	VC	7.3-6
Engagement		VE	7.3-8
Talking about progress	●		7.3-12

Figure P.1-3 *We focus on key elements to engage employees in exceeding our mission & attaining our vision*

operations. Employees routinely receive training in all aspects of electrical, natural gas and biohazard awareness safety. Key elements that engage staff to achieve the Mission (M) and Vision (V) are drawn from Gallup research (**Figure P.1-3**).

P.1a4 Assets DPU builds, maintains and operates utilities infrastructure with a book value of $271 million (**Figure P.1-4**). Because of the unique topography, these assets are incredibly complex for the population served. For example, Santa Fe's 83,000 citizens are served by four lift stations, while our 18,000 citizens require 27 lift stations. Our electric power generation portfolio has allowed us to provide approximately 30% of our power from renewable energy resources while maintaining competitive electric rates.

Product	Asset
Electric Production	2 hydroelectric power plants, shared ownership in 2 coal-fired plants, 1MW PV panels & batteries
Electric Distribution	2 substations, 236 mi. underground & overhead lines, 2387 poles, 2010 transformers, 9000+ meters
Natural Gas Distribution	4 entry stations, 18 PRV stations, 128 mi. main & 83 mi. delivery pipelines, 7000+ meters
Water Production	12 wells, 25 tanks, 17 booster stations, 4 disinfection facilities, 45 mi. pipeline
Water Distribution	64 PRV stations, 118 mi. main lines, 41 mi. delivery lines, 7000+ meters
Non-Potable Water	Dam, catchment, 6 tanks/ponds, 2 PRV stations, 14 mi. main, 2 mi. delivery lines
Wastewater Collection	118 mi. main lines, 45 mi. delivery lines, 27 lift stations
Water Treatment	2 plants, biosolids composting facility

Figure P.1-4 *We maintain & operate a robust infrastructure in rugged & challenging terrains*

P.1a5 Regulatory Requirements DPU maintains and operates systems to meet or exceed regulations and industry standards. **Figure P.1-5** shows our key regulatory interfaces.

Area	Key Regulators
Electric Production	FERC, NERC, WECC, ACE, BOR
Electric Distribution	NESC (voluntary)
Natural Gas Distribution	USDOT, PHMSA, NMPRC
Water Production/ Distribution	EPA, NMED, NMOSE
Wastewater Collection/NP	EPA, NMED
DPU	OSHA, GFOA, NMOMA

Figure P.1-5 *Mandated regulatory compliance is exceeded by our mission to provide safe, reliable & sustainable utilities*

P.1b Organizational Relationships
P.1b1 Organizational Structure LAC Charter provides for DPU to operate the four County-owned utility systems; the Board of Public Utilities (BPU) provides the governance structure. DPU leadership system structures and mechanisms are shown in **Figure 1.1-1**. The originators of the Charter recognized the importance of a semi-autonomous municipal utility with checks and balances. BPU members are citizens appointed by the elected County Council. The power of BPU is checked by the County Council having approval authority on all major expenditures, budget and rate changes. BPU

directs utility policy with the goal of balancing customers' needs with financial oversight and proper management and operations. The Utilities Manager (UM) is appointed by and reports to BPU. The Senior Management Team (SMT) consists of four Deputy UMs and a Public Relations (PR) manager reporting directly to the UM:
1. Electric Production & Distribution
2. Gas, Water, Sewer
3. Engineering
4. Finance and Administration (F&A)
With the exception of PR and F&A, each operations area has a superintendent or senior engineer who reports to the deputy manager for that area.

DPU contributes revenue to the County General Fund and pays for services provided from the County, such as finance and accounting, payroll, human resources, fleet, information technology, risk management, and legal services.

P.1b2 Customers and Stakeholders DPU serves a unique customer base. In a study conducted by American City Business Journal (2014), Los Alamos County topped the list as the best place to live in America in terms of quality of life. This was attributed to high levels of job stability, income and education of Los Alamos residents, many of whom are employed as scientists and engineers at LANL. The county has one of the highest number of PhDs per capita and median household income is among the highest of all counties in the US. Compared to surrounding counties in northern NM, our residents are also ethnically diverse. There is strong interest in our community in innovation, sustainability, and high-tech solutions to community challenges. This drives DPU to continually push boundaries in a typically slow-changing industry. DPU serves approximately 9,662 customer accounts, which represent 17,950 citizens. DPU's market includes 5,535 single family and 3,254 multi-family residential units, 654 commercial and 219 accounts serving LANL, LAC, LA Public Schools (LAPS) and Los Alamos Medical Center (LAMC).

Electric power for LAC and LANL is provided through the Los Alamos Electric Coordination Agreement (ECA). ECA was signed in 1986 and renewed regularly with the current term expiring in 2025. Through ECA both parties contribute generation and transmission resources and share costs based on respective energy consumption and demand requirements. LANL purchases approximately 80% of the electricity procured. Power is distributed by each party through its own distribution network.

LANL is also DPU's largest water customer, purchasing approximately 30% of water produced. DPU provides wholesale water to LANL for distribution through its infrastructure. In 1998 DPU acquired the water production system from Department of Energy (DOE). Having one very large customer using a large percentage of water and electric resources and paying an equitable share for costs allocated for each of these utilities provides economies of scale for the rest of DPU's customers.

Requirements and expectations (**Figure P.1-6**) for utility

services are similar for all customer groups across all utilities. All customers experience inconvenience when utility services are interrupted and want quick restoration. Commercial customers have additional concerns as they can experience loss of revenue if business operations are affected. LANL's critical national missions and other large customers could also be compromised by utility disruption. Utility and infrastructure requirements are necessary for LAC to be competitive for economic development opportunities.

Market/ Customer Group	Key Requirements	Results (Figure)
Residential: 5, 4, 3, 6	1. Reliability 2. Quality Performance 3. Affordability/Value 4. Excellent customer service 5. Online/in-person access 6. Renewable energy sourcing	7.2-3
Commercial: 1, 3		7.2-2
Large Customers (LANL, LAPS, LAMC, etc.) 1, 2, 6		Key Account Outcomes (Figure 3.1-2)

Stakeholder Group	Key Requirements	Results
Workforce	• Safe work place • Job satisfaction/engagement • Communication • Recognition	7.1-27 7.3-5 & 7.3-8 7.3-12 7.4-2
Regulatory Agencies	Compliance	7.4-5 thru -8
LAC	• Revenue • Reliable utilities • Infrastructure development	5% GD/ED revenue + fees & payments 7.2-9 7.2-2 & -3 7.1-16
Community Partners	• Environmental care • Trustworthy • Innovative	7.4-17 7.4-10 thru -16 7.1-25a

Figure P.1-6 *DPU rigorously tracks key measures to ensure we meet customer requirements.* *Note: Numbers under customer groups reflect relative importance of key requirement.*

Deployment	Learn	Integration with MVV, CCs Requirements Strategy
Electric	2015 2017	M, V, VC, VNR, CCA, CCS, CCR LAC revenue Value of Solar Smart metering SO1.4-5, SO5.1-2
Gas	2016	M, VC, CCA Lower rates SO1.2, SO5.4
Water	2016	M, VC, CCA, CCS LAC revenue SO1.1, SO5.3
Sewer	2017	M, VC, CCA SO1.3, SO5.5
SO=Strategic Objectives (Figure 2.1-4)		

Figure P.1-7 *Rate studies provide data that informs SMT strategy & decision-making*

Supplier (S) / Partner (P)	Key Requirements	Work System Role	Competitiveness Role	Communication Mechanism	Innovation Role
(S) Electric providers (25%)	Stable pricing	EP	Low rates	Contracts	Carbon neutrality
(S) Natural Gas providers (100%)	Quality, reliability	Gas supply	Low rates	Contracts	None
(P) LANL	Cost/risk assumption	EP	Low rates, shared risk	ECA	EP hydro infrastructure & carbon neutrality (80% of cost)

Figure P.1-8 *Supplier network requirements mirror our customer requirements, enabling us to provide reliable & adequate utilities*

One of the key requirements of all customers is to keep rates competitive with our neighbors. Our approach to this important need is to conduct regular rate studies (**Figure P.1-7**). For example, we completed an electric rate study to unbundle rates and implement a "value of solar" tariff. This will poise us for effective implementation of advanced metering infrastructure and rate designs, which addresses key requirements of billing accuracy, competitive rates and sustainability. These studies, directed through our strategic plan (SP), monitor performance on key customer requirements.

P.1b3 Suppliers and Partners Although DPU owns a significant amount of its utility supplies, we purchase natural gas and a portion of the required electricity to meet customer demands. Because of the importance of utility reliability in this remote County with a national laboratory, we carefully select suppliers who can seamlessly provide products that meet or exceed our customer requirements. As shown in **Figure P.1-8**, key suppliers contribute to enhancing competitiveness and innovations that our sophisticated customer base expects.

P.2 Organizational Situation
P.2a Competitive Environment
P.2a1 Competitive Position We are legally chartered to provide utilities for LAC and are the sole provider of such services. However, we operate as a highly innovative, competitive utility that exceeds customer expectations. This approach reduces the possibility of privatization, outsourcing, or consolidation.

There is limited growth in existing services due to county boundaries, but DPU has made cycles of improvement to address business growth in areas such as "smart meters," renewable energy options, and infrastructure to accommodate electric vehicles (EVs). Another area of growth is over a decade of expansion of non-potable water infrastructure utilizing grants. Growth also includes marketing power scheduling services to Kirtland Air Force Base and Sandia National Laboratory in Albuquerque.

P.2a2 Competitive Changes Collaboration with LANL has allowed DPU to become an electric power producer, which has made us very competitive with investor-owned, for-profit utilities. Our strategic planning focuses on energy innovation by studying alternate sources around the globe. Membership in Utah Associated Municipal Power Systems (UAMPS) has allowed access to innovative EP technologies such as nuclear small modular reactors (SMR).

P.2a3 Comparative Data For the past four years, DPU has undertaken a systematic effort to acquire and use more comparative data for all key work system measures. **Figure P.2-1** shows our key sources of comparative data; competitive data is gathered during rate studies.

Within Industry	Outside Industry
APPA APGA AWWA BAR Net Promoter Score (NPS)	Baldrige Award Recipients (BAR) Gallup NPS

Figure P.2-1 *In 2018 DPU made a concerted, strategic effort to obtain benchmarks for key measures*

Area	Strategic Challenges (SC)	Strategic Advantages (SA)
Business	Reliance on LANL Rate increases for infrastructure Unbundle rates & implement "value of solar" tariff Rapidly changing electrical industry with alternative technologies Additional SCs AOS	Ownership of low-cost electric & water supply Competitive rates Vertically integrated supply chain enables diversified options LANL as a very large customer of water & electric services LANL partnership: innovations by sharing financial risk
Operations	Flat or declining sales Water revenues down due to conservation Aging infrastructure makes it hard to maintain reliable service Aging meters result in lost revenues for electricity, gas & water New gas & environmental regulations	LAC initiatives (i.e. industrial park) can lead to more customers or utilities sales Good utilization of funds Excellent maintenance & CIP execution
Society	Environmental issues such as groundwater contamination Concerns from public for placement of new water wells Distributed generation (roof top solar)	Renewable electric generation resources Customers want renewable energy & are willing to pay
WF	Recruitment of certified water & wastewater operators Need to cross train Increasing work load Union contracts limit salary structure for experienced WF	Quality staff with expertise Supportive management, close-knit culture Competitive salaries & benefits

Figure P.2-2 *Strategic challenges & advantages are determined during annual SP, flowing from State of the Utility, SWOT & White Papers*

Limitations in using industry comparative data for strategic planning, process improvement and daily operations center on our high desert, rugged, remote location and that we provide electric and gas services. Most municipal utilities do not. We must also consider our small customer base with one very large industrial customer when using comparisons.

P.2b Strategic Context SMT conducts annual SP; part of the first morning consists of a Strengths, Weaknesses, Opportunities, Threats (SWOT) analysis that leads directly to updating strategic challenges and advantages (**Figure P.2-2**).

P.2c Performance Improvement System DPU strives to systematically improve performance at all levels of the utility (**Figure P.2-3**). DPU has used the Baldrige Excellence Framework for self-assessing performance since 2008 and QNM feedback reports and Baldrige assessments guide improvement efforts, especially during strategic planning. DPU's approach is Plan, Do, Study, Act (PDSA) to guide decision making, continuous improvement initiatives, organizational learning and innovation processes. This approach is used throughout DPU by leadership (system-wide), in key work processes (KWPs) (**Figure 6.1-2**), and down to team and individual level.

Ways We Study Performance
Weekly Team Meetings
Job Tail-Gate Meetings
Post-incident Reviews & Root Cause Analysis
Monthly SMT Performance Reviews
Review Dashboards & Regulatory Compliance Data
Monthly SMT 1-on-1 Progress Meetings with the UM
Monthly Budget & Customer Consumption Reporting
Quarterly SMT Budget Reviews
Quarterly Action Plan Reviews
Quarterly Department-wide Performance Reports
Quarterly Asset Management Team Meetings
Quarterly Condition Assessment to the BPU
Mid-year Personnel Performance Coaching
Annual PPA & Individual Planning
Annual Department-wide Performance Reports
Annual AMT Governance Team Meeting
Annual department-wide budget review & planning
Annual review of LA Scores during the budget planning process
Annual review of KPMS during strategic planning

Figure P.2-4 *We study performance in multiple ways to ensure we're meeting customer expectations & regulatory guidelines*

Figure P.2-3 *We have embedded improvement cycles through our Performance Improvement System*

This symbol represents DPU performance improvement throughout this document.

This symbol represents DPU innovation initiatives throughout this document.

PLAN Our system-wide PDSA approach begins with MVV to clearly define direction. Strategic goals and objectives are developed through annual SP (**Figure 2.1-1**) to align with MVV. Key Performance Measures (KPMs) are identified for each strategic objective to demonstrate at a high level how successful we are at achieving each of our strategic objectives (SOs).

DO SOs guide development of supporting long-term and short-term initiatives and action plans (APs) with key projects, services, processes and workforce development identified and resourced with input from BPU, County Council, Asset Management Teams (AMT), customers, community, partners and stakeholders. APs are used to set SMT individual annual performance goals and WF performance goals where appropriate. Performance measures may also be identified for initiatives and routine operations. These may be the same as the KPMs, or may further refine performance evaluation measures at a lower level.

**STUDY** As projects and APs progress, performance is regularly tracked and analyzed through various means throughout the year (**Figure P.2-4**). On a less frequent but regular basis, DPU also analyzes results from customer, employee, safety, and regulatory surveys and audits.

ACT Using methods for analyzing performance, improvements occur throughout the year to account for shifting priorities, opportunities, threats and challenges. This could include operating procedure modifications, WF restructuring, budget adjustments, AP revisions, and project deferrals. Frequent reporting mechanisms, such as weekly team meetings allow for real-time course corrections as needed prior to more formal assessments and reporting. During mid-year coaching, supervisors may adjust individual performance goals to more closely align with revised action plans, ensuring that critical changes are disseminated throughout the workforce as needed.

At the KWP, team and individual level, PDSA takes a simpler approach. An improvement effort may start with Plan from an SP action plan or annual PPA process, or may arise from Do or Study steps as WF maintains, operates, monitors and delivers products and services. For example, AMTs spend considerable time studying KWPs before creating a plan for refurbishment or replacement.

1: Leadership
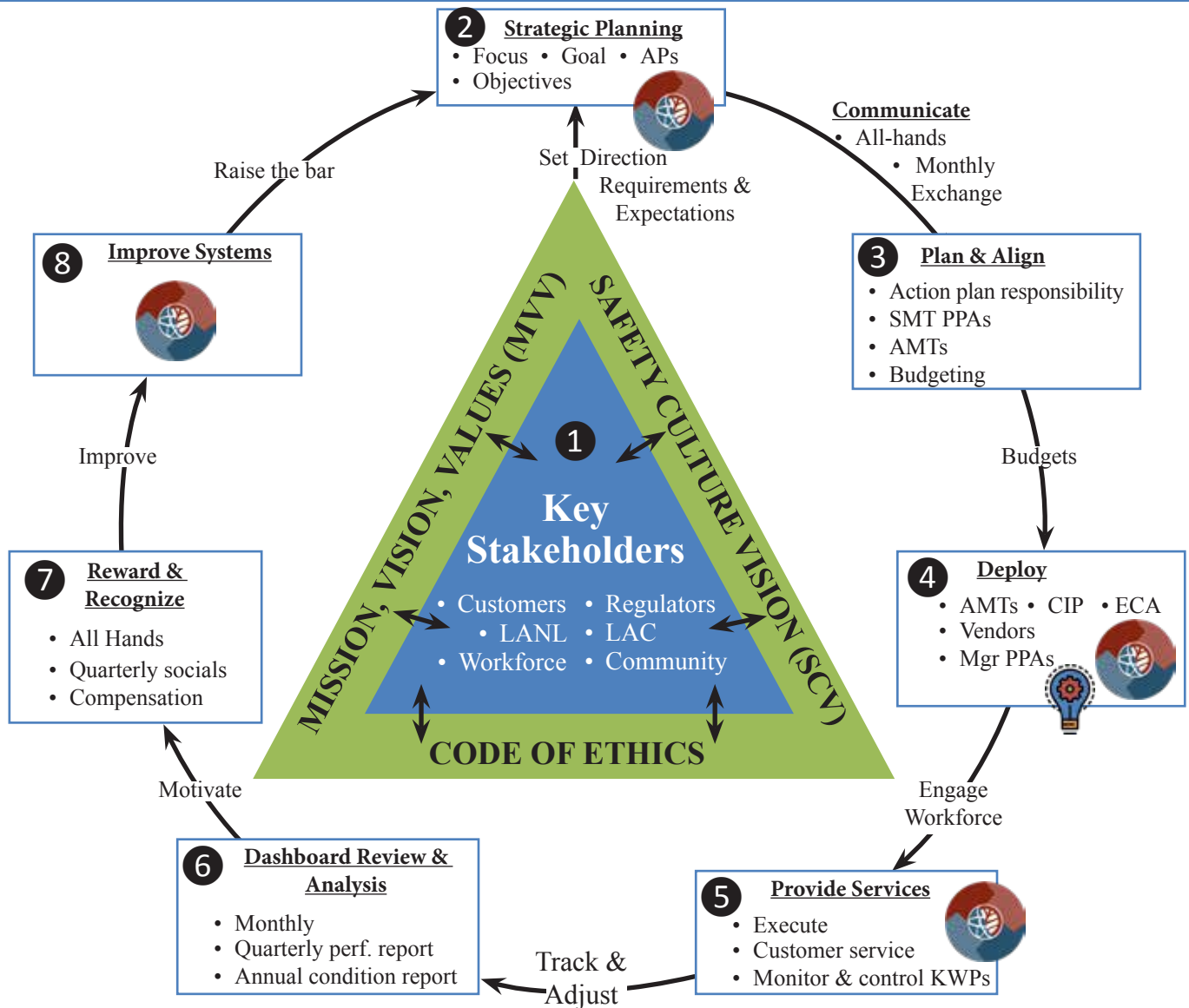
Figure 1.1-1 *Our Leadership System (LS) begins with customer & stakeholder requirements, which are addressed within the culture created and sustained by our MVVs, Safety Culture Vision and Code of Ethics.*

1.1 Senior Leadership Our Leadership System (LS, **Figure 1.1-1**) was developed by the Senior Management Team (SMT). It is used to guide leaders at every level in a unified manner to systematically deploy the MVV by providing them with the tools to model our values and lead consistently.

The LS is embedded in our culture and sets expectations for leaders and employees at all levels in the organization. It begins with our stakeholder's requirements and expectations ❶. All employees are expected to exemplify our Safety Culture Vision and MVV. Leaders are responsible to model these values, communicate, budget, engage the workforce, track and adjust as needed, motivate, improve and raise the bar. These are all responsibilities that cannot be delegated by any leader at any level. The LS is one of the Guiding Systems in the Enterprise Systems Model (**Figure P.1-0**). Arrows throughout the center of the model indicate how deployment and integration take place across all aspects of leadership – it is not "once and done" and is not always linear. SMT models

our values to set strategic direction and communicate ❷ with the workforce. Leaders organize, plan and align ❸ the work for effective deployment ❹. Services are provided ❺ using the key work processes (KWPs) (**Figure 6.1-2**) which have identified key performance measures (KPMs) to analyze performance using a dashboard review ❻. The workforce is rewarded and recognized ❼ for the work accomplished based upon the ability to meet stakeholder requirements and expectations. We learn from continuous improvement at every level ❽ using the PDSA Improvement Process (**Figure P.2-3**). We measure the effectiveness of our LS and commitment to our vision and values through the achievement of our annual goals aligned to our strategic objectives (**Figure 2.2-3**).

1.1a1 Vision and Values
1.1a1 Setting Vision and Values SMT consists of the Utilities Manager (UM), four deputy managers and Public Relations (PR) Manager. They set, affirm or modify mission, vision and values (MVV) in strategic planning (SP) Step ❷ to ensure

Year	Leadership Cycles of Learning
2009	Establish AMTs to lead infrastructure decisions
2010	Create DPU code of ethics; SMT Monthly Exchange
2011	Developed & deployed Compliance Calendar
2015	Establish annual All-hands meeting; Critical Skills Matrix
2016	Establish financial policies
2018	Focus on measures & benchmarks; increase frequency of dashboard reviews

Figure 1.1-2 *Cycles of Learning for the LS have created an effective leadership process that responds to WF and SH needs.*

Deploy MVVs
All WF: • New employee orientation • WF training • Poster displays in each division office • Emergency contact cards issued to WF • Exchange meetings rotation • "All-Hands" Meetings
Key Customers/SHs/Key Suppliers/Partners: • Annual Report • Quarterly Report • Website • Posters in County facilities • Procurement elements
Leaders Personal Actions reflect commitment to values, legal & ethical: • VE-Create ethics code with customer focus • VC-Complete financial disclosure/conflict of interest • VE-Create Safety Culture Vision • VS-Promote transparency through SM • VS-Establish SP objectives reflecting MVV • VNR-Support FER clean energy mandate

Figure 1.1-3 *MVV is deployed throughout DPU and acts as a unifying force in our community.* *See Figure P.1-2 for VC, VE, VS, VNR*

alignment with our purpose. MVVs are reviewed annually by Board of Public Utilities (BPU) and SMT. This process has resulted in modifications to MVV over the last several years to better align and address focus areas and DPU's overall direction. SLs deploy MVV through the Leadership System (LS) by making decisions and strategies consistent with MVVs, Safety Culture Vision and Code of Ethics (**Figure 1.2-5**). Examples that reflect SLs' commitment to MVV are shown in **Figure 1.1-3**.

1.1a2 Promoting Legal and Ethical Behavior Leaders' personal action demonstrating commitment to legal and

Processes for Promotion of Legal & Ethical Behavior
Open and Transparent - Post agendas, meeting minutes and reports to web and follow open meeting laws; complete conflict of interest disclosures
Bid fairness - Conduct an impartial bid evaluation process for all bids and RFPs
Procurement training and processes to ensure fair processes to treat all vendors equally
Procedures governing entry to private property
Develop/deploy **code of ethics**
Compliance Calendar (AOS) ensures meeting regulatory and legal requirements

Figure 1.1-4 *Leaders actions demonstrate their absolute commitment to legal and ethical behavior throughout DPU*

ethical behavior are shown in **Figure 1.1-3**. Promoting an environment that requires such behavior goes beyond serving as role models - processes deployed throughout the Utility are shown in **Figure 1.1-4**.

Leaders have created an organizational environment that requires legal and ethical behavior through such processes as the Compliance Calendar, which was established in 2011 and has been continually improved. The calendar, available on site (AOS), is distributed to SMT monthly to ensure legal compliance with regulatory requirements. This has improved quality and timeliness of reporting and compliance with multiple regulatory requirements (**Figure P.1-5**). DPU partners with Los Alamos County (LAC), contractors and Los Alamos National Lab (LANL) to provide services and run operations in compliance with all laws and regulations ❺. SMT also empowers the workforce (WF) to proactively solve issues in a timely and legal manner.

1.1b Communication SLs create an environment to encourage employees to discuss ideas and facilitate resolution when there is disagreement (**Figure 1.1-5**). To improve communication and engagement for all employee levels with the UM, an SP action plan (AP) was implemented in 2010 to hold SMT Monthly Exchange meetings with work groups. These meetings allow employees to bring up improvements or problems, discuss processes, highlight successes and help all employees understand their role to achieve goals, objectives and needed changes. Monthly meetings are now rotated through each division twice per year. A further engagement improvement began in 2015 to conduct annual all-hands meetings, that include overview of MVV, safety, strategic goals, and WF recognition (promotions, awards, etc.) to engage all employees.

SLs Communicate & Engage						
Approach	Freq	2-way	WF	C/SH/P	Decisions	Motivate
All-Hands Meeting ❼	A	√	√		√	√
Monthly Exchange	M	√	√		√	√
Social Media	24/7	√		RBC LAC	√	
Socials	Q	√	√			√
Strategic Plan	A		√		√	
PPAs	A	√	√			√
Reward & Recognition	Q	√	√			√
AMT	A, Q	√	√		√	
Reports	AQM		√	All		
Community Support	Var	√		See Figure 1.2-6 All C/SH/P		
(C/SH/P)=Customers/stakeholders/partners, R=residential, B=businesses, L=LANL, RA= regulatory agencies, C=communities; Frequency: M=monthly, Q=quarterly, A=annually, Var=variable						

Figure 1.1-5 *DPU deploys key decisions and motivates the WF toward high performance with customer focus in a variety of ways. Approaches vary in frequency, format and target audience.* *See also communication and engagement in the LS and communication methods in Figure 3.2-3*

1.1c Mission and Organizational Performance
1.1c1 Creating an environment for success DPU focuses on the mission and provides forums for agility (**Figure 1.1-6**). Intelligent risk-taking is discussed in the context of SP as DPU moves toward achieving aggressive goals such as carbon neutrality by 2040.

Create Environment for Success Now & Future	
Achieve mission	• Goal setting ❷ & dashboard reviews through SPP ❻ • Annual WF goals through PPA process; mid-year coaching ❸❹ • Reward and recognition ❼ • SMT Monthly exchange • Execute mission through AMTs • Community outreach
Org. Culture	• MVV ❶ • Ethics Code customer focus ❶ • Safety Culture Vision ❶ • Citizen ad-hoc meetings
Cultivate agility, accountability, learning, innovation, risk-taking	• **Learning & Agility:** investment in WF training & development; critical task matrix • **Organizational Learning:** Accident/near miss process, SPP, SMT lessons learned, complaints, CCC • **Innovation:** Deploy fact-based decision-making tools to create a sustainable organization (cost-benefit analyses, feasibility studies, engineering evaluations and 10-year financial forecasts) • **Innovation:** Inventory (Figure 7.1-25a) • **Innovation:** NMMEAA bonding arbitrage for discount gas (AOS) • **Innovation:** Financial policies guide rate changes • **Risk-taking:** AMTs, capacity & condition assessments, master plans, renewable energy product line, non-potable water system expansion, carbon-neutral goal
Foster customer engagement	• Accurate meter reading/prompt billing • Fiscal accountability & transparency ❻ • Competitive rates with efficient & effective operations • Prudent capital & commodity planning • Ad-hoc citizen committee (i.e FER)
Foster WF en-gagement	• Code of Ethics ❶ • Safety culture vision ❶ • Wellness initiatives, recognition ❼ • WF biennial survey outcomes
Future leaders	• Critical Skills matrix • Succession planning • Mentoring Process • PPA coaching process • Training, cross-training • Apprentice programs

Figure 1.1-6 *SLs actively develop and assess approaches for success. Step numbers refer to Figure 1.1-1.*

The critical skills matrix was a 2015 innovation to provide mission achievement, agility and to develop future leaders. For key positions, critical duties are defined and employees with similar duties/skills are assessed as to their readiness to carry out key duties. This matrix is used to 1) direct training of staff to assume mission critical tasks, 2) show employees what training they need to be competitive for that position and 3) show management where resources need to be placed to avoid disruption of mission critical activities. In addition to the matrix, SLs take a holistic view of the entire DPU WF resources to ensure in-house succession capability.

SLs participate in developing future leaders by mentoring, apprenticeship programs and supporting LAC Leadership Academy training for employees. DPU works with LAC to successfully promote from within.

1.1c2 Creating a Focus on Action SLs create a focus on action through the LS (**Figure 1.1-1**) with systematic processes to review the organization's objectives with dashboards ❻ starting at the UM/Deputy level. Those dashboards flow down to reviews between Deputies and superintendents. Each SL and superintendent monitors a variety of measures and actively seeks benchmarks for all key measures. Needed actions are identified in ❸ and expectations are set in ❹. When possible, DPU focuses on actions that have multiple benefits to DPU or stakeholders (SH). For example, the sewer or wastewater collection (WC) system assessment process enables us to complete targeted repairs, use trenchless technology to minimize environmental impact, save money and develop a new WF capability. The most recent improvement was made under the guidance of the WC AMT which researched and adopted the National Association of Sewer Service Companies Organization (NASSCO) Pipeline Assessment Certification Program (PACP). We determined that it was cost effective to train one of our employees as a NASSCO PACP trainer and move

Create a focus on action to:	
Achieve mission ❶❺	• AMT actions • PPA goals & coaching • Performance measures linked to budget

Improve performance ❽	• **Figure P.2-3** and PDSA throughout DPU, such as:
	  o Video assessments of sewer systems
	  o Enhanced GIS capabilities
	  o O&M software for WWTP, WP & hydroelectric plants

Identify needed actions ❷❸❻	• Strategic Planning (**Figure 2.1-1**) • AMT process optimizes repair/replace • Dashboard review of performance trends/benchmarks
Set expecta-tion ❹	• SP Objectives & measures • PPAs and coaching • Benchmarks & targets for KPMs
Create & balance value for customers/SH ❺❻	• Timing of CIP with LAC road projects reduces costs of both projects • Make intelligent in-house vs. contracting decisions (i.e. engineering designs, GIS) • Produce, not purchase electric power • Utility rate studies to reduce price volatility, ensure costs are correctly allocated to users, build reserves for major CIPs • Independent studies to measure industry trends, cost of service, commodity availability & cost, new technology & innovative opportunities • Value of solar study • Focus on reliability (SAIDI)
Personal account-ability ❸❹	• PPA reviews • UM performance review by BPU using SP goals • Condition Assessment reporting to BPU by Deputies

Figure 1.1-7 *Leaders execute the mission, improve performance and balance values for customers and stakeholders.* Step numbers refer to Figure 1.1-1.

25

certification training in-house. In the spirit of partnering with our neighbors, DPU offers training to SHs, DOE and nearby communities at cost.

Creating and balancing value is a customer key requirement. Customers with distributed generation (DG) or rooftop solar, who place electricity on the grid are compensated at retail rates via a net-metering model. This can result in DG customers offsetting the electric bill when the DG is not producing power (such as at night) and DPU is furnishing the power. As the number of DG customers increases, non-DG customers see this as an unfair subsidy. Focusing on the inequity we conducted a Value of Solar (VOS) study to determine the true value of DG to all customers. We intends to institute the VOS tariff to fairly compensate DG and still recover expenses fairly from DG and non-DG customers alike when the sun is not shining.

| Year	Governance/Societal Cycles of Learning
2010	Code of Ethics
2011	Safety Culture Vision
2013	Ethics training
2014	BPU Policy & Procedures Manual: FER
2015	BPU annual self-assessment

Figure 1.2-1 Organizational learning has created a culture of ethics and safety

1.2 Governance and Societal Contributions
1.2a Organizational Governance
1.2a1 Governance System County Council appoints the five Board members to staggered five-year terms to govern DPU. Members must complete and submit financial and conflict of interest documents required of all senior LAC personnel. DPU is an enterprise fund established by County Charter to be financed and operated like private business enterprises. The UM is hired by BPU and is accountable for SL's actions and all performance results. The rest of SMT is accountable to the UM for strategy, action plans, goals set in PPAs, daily operations and supervision in their respective areas. The SP is provided to the BPU for approval, providing accountability for strategy. Fiscal accountability is assured through budget approval; BPU reviews and recommends approval of budgets and rates. Council has final approval authority for budgets and rates.

In the closed-loop governance system (**Figure 1.2-2**), citizens ❶ elect County Councilors ❷ that appoint the BPU ❸. BPU enters into an employment contract with the UM ❹, who is responsible for daily management ❺. Every employee ❻ is responsible for understanding how their work impacts citizens ❶.
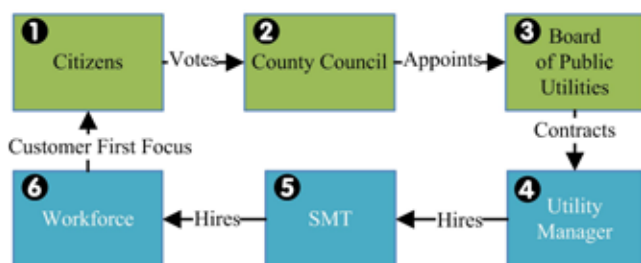
Figure 1.2-2 Our governance structure keeps DPU independent, responsible and in touch with our customer citizens

Transparency of operations is achieved through a variety of communications and interaction with BPU. Most notably is the extensive condition assessment presentation deputy utility managers give BPU quarterly (AOS).

Selection of board members is done through a process like hiring: recruitment, interviewing by a BPU panel and appointment by the Council. In 2014 DPU enhanced the recruitment process to include social media, a brochure, ads, press releases, and flyers posted in libraries and stores, etc. These enhanced approaches have resulted in more applicants and better diversity that reflects our communities (**Figure 7.4-4b**).

DPU undergoes multiple audits (**Figure 1.2-3**). Using final reports and auditor feedback, DPU takes immediate action or folds more significant changes into SPP. Our effectiveness in using audit findings is reflected in key dashboard results. For example, we radically changed the line locating process based

Type	Focus of Audit
5 yr. Mgt. Audit (External)	Enterprise-wide audit of efficiency& effectiveness of operations
Annual $ Audit (External)	CAFR plus DOE requirements GAAP/GAS compliance Single Audit Act
Annual PSB Gas Audit (DOT/PHMSA)	Varies by year: public outreach, procedures, operator certs, leak survey/line hits, etc.
NMED	WWTP inspection

Figure 1.2-3 Independent audits ensure key work and support processes are meeting regulatory requirements

on audit findings resulting in improved dashboard measures which have been sustained. SH interests are protected in a number of ways. We use their requirements as input into SP and we finalize SP by balancing their needs and providing value. We also listen and learn daily, weekly and monthly (**Figure 3.1-2**) and respond to their concerns.

Succession planning for leaders is based on our value of promoting from within. Our turnover rate for senior leaders is very low; the last UM had 24 years tenure and the current UM has been in DPU for 25 years. With two exceptions when there were no DPU internal applicants, all SMT members are internal promotees.

1.2a2 Performance Evaluation DPU undergoes a management audit every five years as required by Charter. BPU evaluates performance of the UM annually; all other SLs and superintendents are evaluated annually in the PPA process. In 2014, BPU decided to evaluate their own performance on an annual basis. The results of these evaluations are used to improve effectiveness of leaders and BPU. Performance of LS (**Figure 1.1-1**) has been improved with the addition of the Code of Ethics and Safety Culture Vision (SCV).

Other than expenses, BPU members are not compensated. Compensation for all non-union WF members, including SLs, is based on performance: Meets, Exceeds, and Far Exceeds ratings earn varying raises (i.e. typically 2%, 3% and 4% respectively).

1.2b Legal and Ethical Behavior

1.2b1 Legal and Regulatory Compliance BPU and Council meet all requirements for the NM Open Meetings Act (NMOMA) to ensure all actions and deliberations are conducted in public view. All procurements of goods and services are conducted in accordance with the LAC procurement code. Utilities rate changes are first debated in a public hearing before BPU and then again before Council when the rate ordinance is adopted. DPU operates under numerous state and federal permits and compliance is of the highest priority. DPU implemented and monitors a Compliance Calendar for tracking compliance issues for regulatory agencies (**Figure P.1-5**). We address any adverse impacts of products and services through regulatory compliance and strive to minimize impacts through improving energy sourcing and innovations, such as reducing our reliance on coal.

We anticipate public concerns through many listening processes (**Figure 3.1-2**). We proactively prepare for and address these concerns with future products through a robust citizen ad-hoc meeting process. See **3.1b2** for a more complete explanation of the process and results for Future Energy Resources (FER) committee. 💡

Key compliance and risk processes, measures and goals are shown for each area of operation in **Figure 1.2-4**. More processes, measures and goals are AOS.

1.2b2 Ethical Behavior DPU leaders require all operations to be conducted in a legal and ethical manner. Key processes to promote and ensure ethical behavior include a Code of Ethics which was formally adopted by BPU in 2010. In 2013, DPU initiated a process for training on and deploying the Code of Ethics (**Figure 1.2-5**). New Employee Orientation includes this training to ensure ethical behavior throughout DPU. Education and reinforcement measures are on the DPU dashboard. Key processes and measures are shown in **Figure 1.2-4**.

Promoting ethics with suppliers, partners and SH is done primarily through contracts and other legal agreements. Ethical breaches are included in dashboard reviews.

1.2c Societal Contributions

1.2c1 Societal Well-Being DPU considers societal well-being and benefit as part of both strategy and daily operations. Four of our six strategic focus areas contain objectives which address societal wellbeing; Operations & Performance, Financial Performance, Customer & Community and Environmental Sustainability (**Figure 2.1-4**).

In daily operations, monitoring, inspection and surveying (higher level reporting as shown in **Figure 1.2-3**) keep our customers and community safe by providing high quality water, detecting and repairing gas leaks and maintaining electric poles and lines and collecting and treating WW to be safely released into the environment.

DPU contributes to the well-being of environmental and social systems by planning for sustainability (CCS) and

Area	Key Process	Authority	KM	Goal
R: Finance	Audits	NMOSA	F	NV
R: Finance	Internal Controls	DPU	V	NV
R: Finance	Loan Covenants	Bond Trustee	V	NV
L: EP	IRP	PUP*	C	NV
L: WP	Dam inspection	NMOSE	F	NV
L: Gas	Leak Survey	NMPRC	TC	NV
L: WWTP	Discharge Monitoring	NMED	AV	NV
L: DPU	Safety	NM OSHA	V	NV
E: WF ethics	Code of Ethics	Code	Tr	100%
E: CI	Governance	LAC	AC	100%
E: SH PS	Contracts	LAC	AC	NV

Area: R= Risk; L= legal/regulatory; E= ethical; KM=Key Measure; F= findings; T=on-time; A=accurate; C=complete; Tr=trained, V=violation; NV=no violations; CI=Conflict of interest; SH=Stakeholders, PS=partners, suppliers
Typical investor-owned utilities are required to do this by NMPRC; we do it for prudent utility practice (PUP).

Figure 1.2-4 *Our industry requires many key legal compliance processes and measures; above is a sampling from across our business enterprise.*

We will be:	Approach/Deployment
1. Trustworthy	• Give correct & and up to date info • Never enter residence without occupant presence • Respectful of customer's property • Never give appearance of violation of trust
2. Professional	• Provide info in areas of expertise • Never allow personal feelings to interfere • Be best at our craft • Seek ways to improve
3. Service-oriented	• Customers are the reason we are here • Be engaged, responsive & go the extra mile • We are friendly, receptive & courteous • Keep appointments; be on time
4. Fiscally Responsible	• Make decisions to preserve/improve service • Consider rate impact on all financial decisions • Prudently consider financial impacts • Be transparent & follow all laws
5. Organized	• Respect & follow DPU processes, policies, rules & regulations • Be efficient, make decisions based on facts • Present information concisely & factually
6. Communicative	• Listen to the customer • Be approachable,& willing to dialog • Allow others to add input & value • Keep customers informed
7. Collaborative	• Cooperate with other groups & individuals • Build consensus & gain value from diverse opinions •Be a team member
8. Progressive	• Promote intelligent, thoughtful solutions • Maintain consistent standards • WF & customer safety are of paramount importance
9. Innovative	• Promote proactive, new approaches to setting goals & conducting business • Keep abreast of technological developments • Incorporate safety & improvements to practices and processes
10. Fair	• Treat all with courtesy & respect • Realize that financial decisions impact all • Apply rules equally to all • Do not disadvantage local businesses

Figure 1.2-5 *DPU Code of Ethics is integrated with our four values and broadly defines the characteristics of our culture*

valuing natural resources (VNR). DPU's planning processes enabled us to increase renewable energy generation and add smart-grid components to more efficiently manage some of these resources. Northern NM experienced a wide-spread natural gas outage with thousands losing service in 2011. Restoring services safely is labor intensive and took weeks for the utility provider to get all its customers back online. While we were not affected by this incident, we proactively looped our high-pressure gas system to create redundancy to be able to backfeed gas to our customers. A curtailment procedure was also created permitting us to quickly reduce customers' gas usage. If communities quickly reduce the demand during a supply shortage, we elimante the outage and the inconvenience of having to re-light pilots one property at a time.

To address economic systems, DPU evaluates pricing strategies to influence customer behavior in changing market conditions. Periodic rate and cost of service studies inform decision making and action planning to generate and use revenues to provide excellent service with competitive rates (Objective 2.2, **Figure 2.1-4**).

1.2c2 Community Support Key communities are identified as those that receive or are impacted by our products and services. Key communities include Los Alamos, LAC and White Rock. We determine areas of DPU involvement by those that align with our values and core competencies and

that we can contribute to positively. Educating the public on energy and water conservation, including presentations at organizations such as League of Women Voters, Sierra Club and Rotary, are examples of support aligned to our values. With less than 100 employees providing complete utilities to two communities and a national lab, we fund a local contractor, currently Pajarito Environmental Education Center (PEEC) to plan and conduct major events and activities in the community and at public schools.

Ways we contribute to improving	
*Participate in Earth Day event annually	SL, WF
Serve on LACED committee	WF
*Home Expo (energy & water)	SL
*Water Festival	SL, WF
Donate leave to LAC employees in need	SL, WF
United Way	SL, WF
DPU Christmas Families	SL, WF
Engineering student internships	SL, WF
*Home Tours	SL
*Electric Car Show	SL, WF
*LAPS Energy & Water Conservation Lessons	SL
*Highlights those activities funded by SLs and provided by PEEC SL=senior leader involvement; WF=workforce involvement	

Figure 1.2-6 *We actively support and strengthen key communities.*

2: Strategy
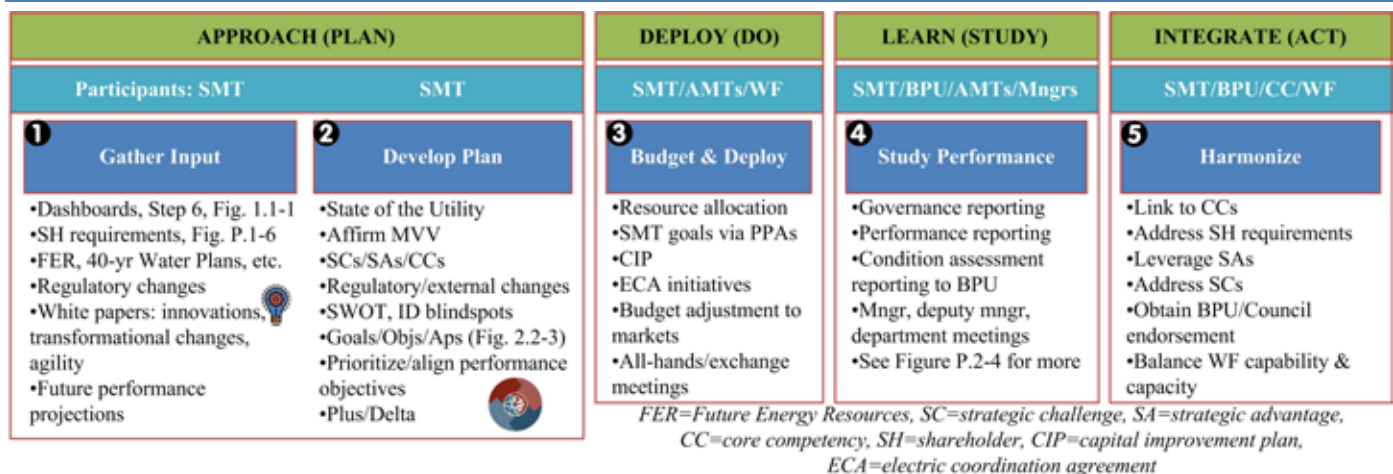
Figure 2.1-1 *Our annual SP process is a key element of our Leadership System (Figure 1.1-1) and enables us to achieve our vision of "high performance." By considering extensive SH input we ensure we "match our community;" we seek new and transformational ideas through research and professional organizations and remain open to new ideas to develop "innovative utility solutions."*

2.1 Strategy Development SMT has engaged in a highly robust planning process for many years, which has enabled DPU to achieve excellence and innovation in many ways (**Figure 7.1-25a**). Within the past five years, the process has been aligned to Baldrige criteria, formalized and improved annually.

2.1a Strategy Development Process
2.1a1 Strategic Planning Process (SPP) Our annual SPP consists of five key process steps (**Figure 2.1-1**). ❶ consists of gathering inputs from many sources and also preparing and updating the previous plan. ❷ is the senior management

team (SMT) workshop, typically two days, where all input is used throughout eight key agenda activities shown. Each SMT member provides status of action plans to achieve prior year's goals, other achievements, challenges, budget status and dashboard reviews and shares lessons learned. Review of work accomplished provides a framework for understanding operational performance and what work needs to be completed. The workshop concludes with a PDSA cycle and improvements such as in 2017 when we added CIP/FERs/40-year Water Supply Plan initiatives so that a broader understanding of the entire scope of work is considered when determining new goals. In ❸, deployment to AMTs and WF begins in order to allocate resources. Once budget and SP are

finalized, the final plan is approved by BPU and is then further deployed to the entire WF through publication, all-hands and exchange meetings. DPU formalized SPP in 2009 and achieved many cycles of learning (**Figure 2.1-2**). ❹ occurs on two levels: we learn about the SP process and adjust agenda and format annually to capture current needs and mandates. We also learn about the effectiveness of deployment and integration throughout the year in the many ways we study organizational and operational performance (**Figure P.2-4**). Studying performance is the primary source of action plan modification. Harmonize ❺ closes the loop with stakeholder (SH) requirements and strategic consideration by scanning the final plan for core competencies (CCs), SH, workforce (WF), strategic advantages (SAs) and strategic challenges (SCs) alignment.

Year	SPP Cycles of Learning
2009	First formal 2-day SPP workshop
2011	Goals & terminology aligned to Baldrige criteria
2012	BPU input/formal acceptance of MVV
2013	AMTs align and deploy SP
2014	SPP aligned to Baldrige criteria, CCs & SC/SAs; PDSA on SPP
2015	Financial performance integrated into focus areas (previously was a separate focus area)
2015	White Papers to address innovation, agility
2016	Employee charrette input into SPP; SIs changed to Baldrige Focus areas
2017	CIP/FER/40-year water plan inclusion
2018	SPP focused on performance measures tracking.

Figure 2.1-2 *Our transition from an informal to formal SPP has been accelerated by using the Baldrige criteria.*

SPP key participants are shown for each step in the planning process. SMT consists of the Utilities Manager (UM), Deputies and Public Relations Manager. Other staff have input during the Asset Management and budgeting processes and Monthly Exchanges ❸ which includes all DPU staff.

Short term (ST) planning horizons (1-5 years) are captured in action plans under appropriate objectives. Longer-term (LT) planning horizons (5-40 years) typically come from guiding documents such as the 10-year CIP, 40-year water plan, FER, etc. Initiatives from these are broken down to shorter term action plans and included under the appropriate objective in SP as part of gathering input ❶.

To provide transformational change and prioritization of change initiatives, we continually seek new ideas in the utility industry as well as achieving operational efficiencies. These are typically conveyed through white papers prepared by individual managers at SP. For example, smart meters, creation of new job descriptions, staffing changes, establishing financial goals and improving governing body relationships are examples of innovations we have implemented. The breadth of gathering input ❶ and the inclusion of WF capability and capacity in Step ❺, drive organizational agility. For example, we make agile WF changes to address new initiatives such

as smart meters, GIS staffing and locates. WF capacity is considered as action plans and timelines are set.

2.1a2 Innovation Input ❶ is a source of innovative ideas, captured in the Innovation Inventory (**Figure 7.1-25a**). Leaders research and present new ideas on the first day of SPP. As SPP develops ❷, each objective is assessed for its potential to use innovation as part of action planning. Innovative opportunities that achieve efficiencies and align with Focus Areas are considered. They may be in the form of new technology, workforce training, modification of an existing process or planning multi-year resources. DPU evaluates innovative opportunities using several processes including cost/benefit analyses, feasibility studies, master plans and engineering analyses to determine if opportunities are intelligent risks. Evaluations of possible opportunities have included the Future Energy Resources (FER) study in 2015 and subsequent related studies and studies on smart meters, electric reliability, renewable energy, low flow turbine, broadband and internet. We conduct engineering evaluations for replacement of treatment plants, composting option and various utility infrastructure.

DPU's strategic goal to increase renewable energy sources began almost a decade ago. A feasibility report supported intelligent risk-taking; the power pool could support adding 10 MW solar photovoltaic (PV) and 3MW low flow turbine generation. SMT added the turbine generator as an SP goal and prepared a design/build request. Unanticipated federal funding became available and we built the low flow turbine at half the estimated cost, saving LAC about $4.5 million dollars. This opportunity happened because DPU was ready to take an intelligent risk as a result of SPP. A second opportunity from the same feasibility study included an option to place PV on a landfill. In 2014, LAC's PV facility was New Mexico's first on a closed landfill. These projects demonstrate that our planning efforts have been effective based on calculated risks that capitalize on strategic advantages and are in alignment with DPU focus areas, goals and objectives.

Current strategic opportunities (**Figure 2.1-3**) include considering what might happen if DOE did not extend the Electric Coordination Agreement (ECA). This would be a major shift in our business model. To prepare for the possibility, DPU joined UAMPs (46 community-owned power utilities) to be able to share electric resources and partner on large-scale new generation projects to stay competitive in a rapidly evolving power industry. For example, we are now three years into positioning ourselves to purchase 8MW in a

2018 Key Strategic Opportunities
1. Post 2025 ECA (LANL)
2. Conservation with AMI resources
3. Partner with Industry on DG expansion
4. LA ED initiatives
5. Council relationships - elections

Figure 2.1-3 *Maintaining awareness of strategic opportunities through annual SWOT has enabled organizational agility in pursuing funding and partnering opportunities.*

600MW nuclear facility using SMR technology to be built in Idaho. This will provide safe, clean, base-loaded electric production.

2.1a3 Strategy Considerations are addressed through robust input gathering prior to planning ❶. Sources include stakeholder input, operational data and future projections. Market changes, such as the price of natural gas and

supplier shortages resulting from regional and national natural disasters, are also considered ❷. We can project key regulatory changes that may impact our operations and plan to address them before we are in violation (i.e. White Rock WWTP). Analysis takes many forms depending on the data source. Most dashboard measures are trended and many have benchmarks to determine level of performance. Other data sources such as regulatory or technology changes,

Note: Strategic Objectives (i.e., 1.1, 1.2) have one or more action plans.	Timeline 2.1b1	CC 2.1a4	SC/SA 2.1b2	SO 2.1a2	S/L 2.1a1	SH 2.1b2	Figure
FOCUS AREA - OPERATIONS & PERFORMANCE **GOAL 1.0 Provide Safe & Reliable Utility Service**							
1.1 Water (WP/NP/WD) - Efficiently deliver safe & reliable water utility services	↑	A	O	2	S,L	R,C	7.1-7
1.2 Gas (GD) - Efficiently deliver safe & reliable gas services	↑	A	O	2	S,L	R,C	7.1-6
1.3 Sewer (WC/WT) - Efficiently deliver safe & reliable sewer services	↑	A	O	2	S,L	R,C	7.1-13
1.4 Electric (EP) - Efficiently deliver safe & reliable electric production services	Continuous	A	O	2	S,L	R,C	7.1-1
1.5 Electric (ED) - Efficiently deliver safe & reliable electric distribution services		A	O	1,5	S,L	R,C	7.1-2, -3
1.6 Business Systems- Efficiently implement & maintain secure & reliable business systems	↓	A	O	2	S,L	LAC	N/A
1.7 Utility control & mapping systems & processes are accurate, safe & secure	↓	A	O	4	L	LAC	N/A
1.8 Develop a culture of continuous improvement	↓	S	B	N/A	S,L	ALL	7.1-25a
FOCUS AREA - FINANCIAL PERFORMANCE **GOAL 2.0 Achieve & Maintain Excellence**							
2.1 Financial Performance - Achieve & maintain excellence	↓	A,S,R	B	2	S,L	LAC	7.4-7
2.2 Utilize revenues to provide a high-level of service while keeping rates competitive with similar utilities	↓	A,R	B		L	R,C	7.5a2
2.3 Meet financial plan targets by 2025	LT	A	B	5	L	LAC	7.5-1
2.4 Achieve workplans while operating within budget	ST	A	B		S	LAC	7.5-2– -7
FOCUS AREA - CUSTOMERS & COMMUNITY **GOAL 3.0 - Be a Customer Service Oriented Organization That is Communicative, Efficient & Transparent**							
3.1 Customer service processes & systems are efficient & user-friendly	ST	R	O,B	2,3,5	S	R,C	7.2-2, -3
3.2 Stakeholders are engaged in & informed about utilities operations affecting their community	ST	S,R	S	5	S	R,C,CP	7.2-6
FOCUS AREA - WORKFORCE **GOAL 4.0 - Sustain a Capable, Satisfied, Engaged, Ethical & Safe Workforce Focused on Customer Service**							
4.1 Leaders invest in employee training & professional development	ST	E	WF	WF	S	WF	7.3-1
4.2 Employees promote a culture of safe & ethical behavior	ST	E	WF	WF	S	WF	7.4-9
4.3 Employees are engaged, satisfied & fairly compensated	LT	E	WF	WF	S	WF	7.3-5
FOCUS AREA - ENVIRONMENTAL SUSTAINABILITY **GOAL 5.0 - Achieve Environmental Sustainability**							
5.1 ELECTRIC (EP/ED) - Be a carbon neutral electric provider by 2040	LT	S,R	O,S	1,3,5	L	CP	7.4-12
5.2 ELECTRIC/WATER/GAS - Electrical & heating efficiency & water conservation is promoted through a targeted conservation program	ST	S	O,S	2,3	S	CP	7.4-14
5.3 WATER (WD) - Potable water use is reduced by 9% by 2030	LT	A,S	O,S	2	L	LAC,CP	7.4-15
5.4 GAS (GD) - Customer heating efficiency is improved to reduce gas usage by 3% by 2030	LT	A,S	O,S	2	L	CP	7.4-13
5.5 SEWER (WT) - Class 1A effluent water is provided in White Rock	LT	A,S	O	4	S	CP	N/A
FOCUS AREA - PARTNERSHIPS **GOAL 6.0 - Develop & Strengthen Partnerships with Stakeholders**							
6.1 Communicate with stakeholders to strengthen existing partnerships & identify new potentially beneficial partnering opportunities	ST	S,R	B	1,3,4,5	S	LAC,CP	7.5-13
CC=Core Competency: A=Accountable Management, S=SP for Sustainability, R=Building Customer & Partner Relations, E=Employee Development; SC/SA= Strategic Challenges/Strategic Advantages: B=Business, O=Operations, S=Society, WF=Workforce; SO=Strategic Opportunities 1-5 (Figure 2.1-3); S/L= Short-/ Long-Term; SH=Stakeholder: R=Residential, C=Commercial, L=Large, WF=Workforce, RA=Regulatory Agencies, LAC=County, CP=Community & Pueblos							

Figure 2.1-4 *DPU SP goals are aligned to our stakeholder requirements, core competencies, challenges, advantages and opportunities.*

are studied for impact on operations and potential changes we must or might make. As we begin SPP, we conduct a SWOT evaluation to uncover potential blind spots. From SWOT results, we redefine our strategic challenges (SCs) and strategic advantages (SAs) (**Figure P.2-2**).

Our ability to execute is considered in ❸, as WF and budget place limits on what can be accomplished on an annual basis. Planning tools include electric load forecasts, condition and capacity assessments for each utility and risk of failure and loss guide prioritization. AMTs meet quarterly to evaluate system condition, needs, issues and regulatory considerations and meet annually to review past performance and propose and justify future WF resources and expenditures for O&M and CIP projects.

2.1a4 Work Systems and Core Competencies (CCs) are addressed in SP. Key work processes (KWPs), shown in the center of **Figure P.1-0**, are accomplished by our workforce as we are chartered to do so. Most key processes (reflected in our strategic objectives) that interface with customers are accomplished by the WF. Larger or longer-term CIP projects may be outsourced based on SP prioritization. Work that can be accomplished by a supplier more economically or that requires a CC or certification beyond WF capability is procured following LAC procurement code. DPU maintains a staff of engineers and project managers who manage and execute such contracts.

CCs are reviewed annually during SP ❷ to determine if goals and objectives are aligned to at least one CC (**Figure 2.1-4**). DPU's commitment to maintaining CCs in the future is exemplified in 2013 with the 1600 electric smart meter pilot project. A feasibility study conducted in 2015 explored conversion to advanced metering infrastructure (AMI) providing electric smart meters to the rest of DPU's customers and incorporating digital gas and water reads. We contracted with an outside firm to independently analyze the conversion. The study identified several clear economic benefits. In March 2019, the contract was awarded and is being deployed with a combination of contract work and WF. This important process change in our meter reading operations aligns with our CC of building customer relationships with improved meter reading, billing accuracy and online customer self-service capabilities.

In 2017, SMT determined that no new CCs were required but noted that a future CC of managing distributed generation (DG) may be needed as the industry evolves. If DG develops into a significant product, we would also need to add it as a new work system. These decisions are made ❷ when doing the SWOT and considering SCs, SAs and CCs.

2.1b Strategic Objectives
2.1b1 Key Strategic Objectives DPU's key focus areas, goals, objectives and timetables are shown in **Figure 2.1-4**. Key changes in our products and operations are increasing our clean energy resources to reach carbon neutrality by 2040. At this time, we are not planning any significant customer, market, supplier or partner changes, other than UAMPs (**2.1a2**). The timetable (continuous, short-term or longer-term)

for achieving SOs is determined in AP development and is reflected in **Figure 2.1-4**.

2.1b2 Strategic Objective Considerations As part of SP workshop, all goals and objectives are aligned with CCs, SOs, SAs and SCs. The AMTs continuously balance the competing organizational needs of the department by prioritizing short and long term improvements, spending and WF capability. Initiatives are prioritized by considering budget, equipment, WF, risk and stakeholders. Initiatives are planned and executed to align with our CCs and strengths of our WF. SAs and SCs are considered in our execution of SOs to approach any known challenge with appropriate resources and use SAs to achieve efficiencies.

AMTs devise long-term plans to large initiatives that exceed annual budgetary and WF resources. Initiatives providing the most value that address the highest risk to the department are evaluated, planned and executed as short-term initiatives each year. The AMTs evaluate use of internal or external resources to meet SOs. DPU considers needs of key SHs as input ❶ and SHs are a part of the final check when SOs have been determined (**Figure 2.1-4**).
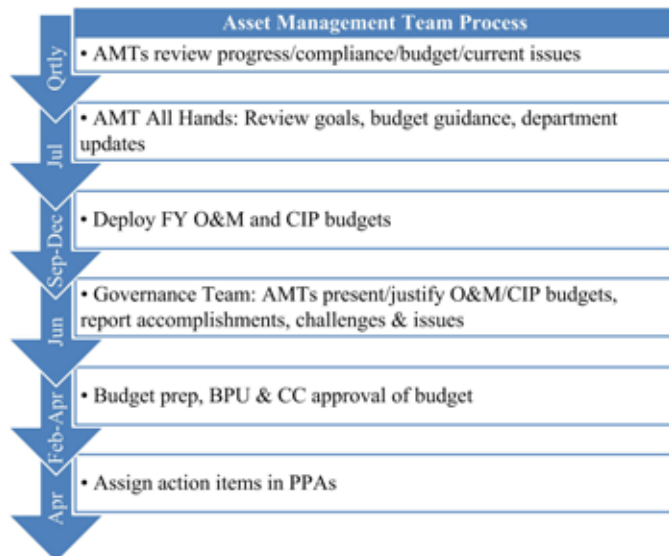
2.2 Strategy Implementation
2.2a Action Plan Development and Deployment
2.2a1 Action Plans (APs) Each goal has one to eight strategic objectives (SOs) (**Figure 2.1-4**). There is a direct relationship between SOs and APs, with each SO having at least one AP that typically sets out one year's actions and outcomes. The UM assigns goals to each deputy that are then included in the respective deputy's PPA for the upcoming year. The deputies develop APs with AMTs and appropriate staff. Key APs are shown in **Figure 2.1-4**.

2.2a2 Action Plan Implementation Deputies deploy APs to WF through the PPA process. Input from the appropriate AMT is also included. Responsibility for completing APs is typically in-house; if a supplier, partner or SH needs to be involved, deployment would occur via a contract or agreement. Key outcomes are sustained through dashboard reviews and SP updates the following year. Some APs roll-over to the following year (i.e. Focus Area 1.0 – Provide safe & reliable utility services is never completed; each year we build upon accomplished APs of the previous year). This ensures that gains are sustained and integrated into daily operations.

2.2a3 Resource Allocation AMTs are foundational to AP deployment and resource allocation. Each of the eight AMTs evaluates work practices and system needs to develop annual O&M and CIP budgets for their utility. AMTs bring together the perspective of superintendents, field workers, engineers and managers. Considering compliance risks, SOs and APs, each AMT presents a proposed O&M and CIP budget for the next fiscal year with an update on potential issues. The AMT Governance team, working with Finance, then finalizes the O&M and CIP budgets for DPU.

The resulting budgets are then analyzed in a ten-year financial forecast model to understand impacts to utility rates, cash

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Asset Management Team Process

- **Qrtly** • AMTs review progress/compliance/budget/current issues
- **Jul** • AMT All Hands: Review goals, budget guidance, department updates
- **Sep-Dec** • Deploy FY O&M and CIP budgets
- **Jun** • Governance Team: AMTs present/justify O&M/CIP budgets, report accomplishments, challenges & issues
- **Feb-Apr** • Budget prep, BPU & CC approval of budget
- **Apr** • Assign action items in PPAs

Figure 2.2-1 *The AMT process plays a key role in ensuring financial and other resources are available to execute action plans.*

reserves, the need to borrow or issue bonds or other impacts to financial viability. Proposed projects and budgets are modified or deferred if the work will cause unfavorable financial results or other risk.

2.2a4 Workforce Plans Key WF plans are developed from the WF focus area (**Figure 2.2-2**) or from a new capability change required by any other focus area.

Focus Area - Workforce	
Goal 4.0 Sustain a capable, satisfied, engaged, ethical & safe WF focused on customer service	
2019 SOs	**2019 Action Plans**
SO 4.1 – Leaders invest in employee training & professional development	Deploy succession plan (LT) Expand LITMOS (ST)
SO 4.2 – WF promotes a culture of safe & ethical behavior	Incorporate safety & ethics into Monthly Exchanges (ST)
SO 4.3 – WF engaged, satisfied & fairly compensated	Conduct Q12 survey (LT)

Figure 2.2-2 *DPU considers potential WF impacts during SP and creates APs to most effectively use our WF to execute strategy*

Goal/SO	Key Performance Measures (KPMs)	Current Performance	Trend	Comparative	ST Projection	LT Projection
1.1 Water (WP/NP/DW)	(WD) Water Main Breaks/100 mi. pipeline				7	7
	(NP) Water Main Breaks/100 mi. pipeline				7	7
	(WP) Drinking Water Compliance				100%	100%
1.2 Gas	(GD) PHMSA Reportable Main Pipeline Leaks/ 100 mi. Pipeline				0	0
1.3 Sewer (WC/WT)	(WC) Sewer Overflow Events/100 mi. pipeline				3	3
	(WT) Gallons of Sewage Conveyed & Treated (Million Gallons)				N/A	N/A
1.4 Electric (EP)	(EP) Hydroelectric Equivalent Availability Factor (EAF) by Unit				100%	100%
1.5 Electric (ED)	(ED) Electric System Average Interruption Duration Index (SAIDI)				<1 HR	<1 HR
1.6 Business Systems	Number of Billing Adjustments				0	0
1.7 Utility control & mapping	Total All Damages /1000 Locate Tickets				0	0
1.8 Continuous improvement	WF Survey: Coworkers committed to quality work				4.0	4.0
2.1 Financial excellence	Audits					
2.2 Competitive rates	Comparative rates Electric, Gas, Sewer, Water				N/A	N/A
2.3 Meet financial targets by 2025	Budget per Expenditure – by utility, see note 1				Annual	2025
3.1 Customer	Net Promoter Score Residential				27	27
3.2 Stakeholders	Safe Drinking Water-Consumer Confidence Report				N/A	N/A
4.1 Invest in WF	WF Survey: Last year I had the opportunity to work & grow				4.0	4.0
4.2 Safe/ethical	OSHA Incident Rate				5	5
4.3 WF engagement	WF Survey: Employee Engagement				4.0	4.0
5.1 Carbon neutral	(EP) % Power Derived from Non-Hydrocarbon Sources				8.7%	8.7%
5.2 Conservation	PEEC Total #People Reached by Conservation Program				3500	3500
5.3 Reduce potable water use by 9%	(NP) Gallons per Capita per Day (Non-Potable)				2030	2030
	(WP) Gallons per Capita per Day (Potable)				2030	2030
5.4 GAS - Reduce 3%	(GD) Therms Per Capita per Heating Degree Day				2030	2030
5.5 Sewer	(WT) Replace White Rock WT Plant	RFP	N/A	N/A	2022	2022
6.1 Partnerships	DPU operation is improved by our Partnerships				>75%	>75%
Shading: Green=Meeting/exceeding, Yellow=Making progress, Red=Action needed						

Figure 2.2-3 *Key short- and long-term action plans are directly aligned to our SOs; measures of performance are on the dashboard and are subject to multiple reviews. Note 1: Some variation in performance by individual utility; see Item 7.1 for specific performance.*

2.2a5 Performance Measures Every AP has at least one measure to track progress and effectiveness (**Figure 2.2-3**). Measures are on the dashboard and are reviewed ❹ as described in 4.1a1. Measures for each key work process (KWP) reinforce organizational alignment. The clear line of sight from SOs to key performance measures (KPMs) to dashboards enables us to track, analyze and improve at three levels: enterprise, operational and work unit.

2.2a6 Performance Projections (**Figure 2.2-3**) are monitored during dashboard reviews. Gaps that can be addressed easily are assigned to a manager; longer-term or complex issues are addressed as an AP modification or new SOs.

2.2b Action Plan Modification We recognize when a shift is required through dashboard review or local events requiring immediate agility. There have been five major natural disasters (flooding/forest fires) in the last 12 years that have caused significant infrastructure damage and disruption to DPU operations. Smaller-scale fires, floods, ice, rodent damage, etc. also require us to shift resources to address a new, higher priority issue. Major shifts in priorities are then readdressed in the 10-year financial plan to cover costs of severe AP modifications.

3: Customers

3.1 Customer Expectations The directive from the elected Los Alamos County (LAC) Council and Board of Public Utilities (BPU) (citizens appointed by Council) is to achieve a high level of customer satisfaction with reliable utility services and spend rate-generated revenues effectively to meet the level of service the community wants.

Year	Cycles of Learning ❸
2011	Social Media
2014	Ad-hoc FER committee
2015	Added NPS and value to survey
2015	Survey includes improved segmentation
2016	Smart mobile app
2017	Improved power outage survey data

Figure 3.1-1 Continuously improving ❸ the ways we listen to customers has been the foundation of the strong relationships we enjoy today.

3.1a Customer Listening

3.1a1 Current Customers DPU has a strong core competency (CC) of focus on customers by building customer and partner relationships (**Figure P.1-2**). Two other CCs—accountable management and sustainability—are also derivatives of current customer expectations. Strategic planning (SP) and our performance improvement system (**Figure P.2-3**) have led to significant changes in the way we listen to customers and exceed expectations through innovative products and services in what is typically a staid sector (**Figure 3.1-1**). It is largely through listening that we have been able to identify and address key business, operational and societal challenges (**Figure P.2-2**). For example, improvements in the way we deploy social media (SM) and the smart mobile app contribute to maintaining our reputation with good customer service, a key strategic challenge. Among many listening improvements is the new DPU web page in March 2017. Using our PDSA improvement model, we analyzed past hit counts and visitor patterns to determine which pages customers were visiting the most and changed our sites to make that content quickly accessible to the largest audience.

DPU values customers and partnerships so listening ❶ to the voice of the customer (VOC) is essential (**Figure 3.1-2**). We vary the frequency and type of listening methods as

shown. Other than going "off the grid" DPU customers have no other utility options. Nevertheless we include former and potential customers in several of our listening processes. These processes span the customer life cycle; from potential, through hook-up, full service, termination and eventually former status.
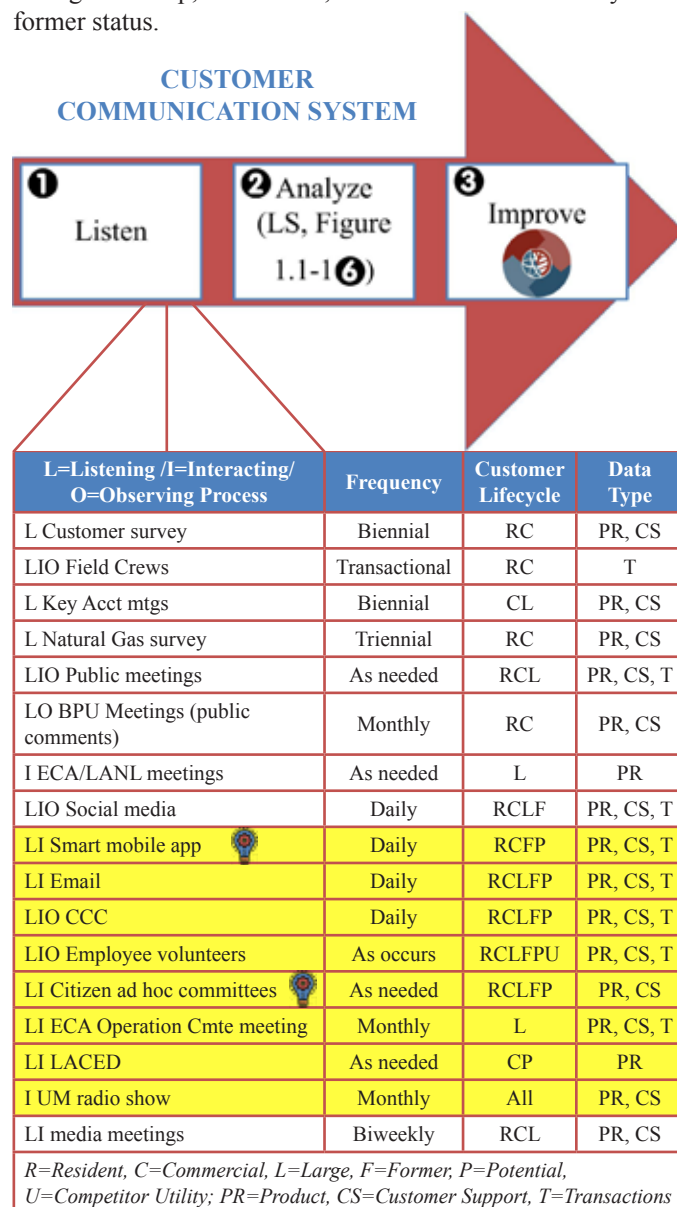
CUSTOMER COMMUNICATION SYSTEM

L=Listening /I=Interacting/ O=Observing Process	Frequency	Customer Lifecycle	Data Type
L Customer survey	Biennial	RC	PR, CS
LIO Field Crews	Transactional	RC	T
L Key Acct mtgs	Biennial	CL	PR, CS
L Natural Gas survey	Triennial	RC	PR, CS
LIO Public meetings	As needed	RCL	PR, CS, T
LO BPU Meetings (public comments)	Monthly	RC	PR, CS
I ECA/LANL meetings	As needed	L	PR
LIO Social media	Daily	RCLF	PR, CS, T
LI Smart mobile app	Daily	RCFP	PR, CS, T
LI Email	Daily	RCLFP	PR, CS, T
LIO CCC	Daily	RCLFP	PR, CS, T
LIO Employee volunteers	As occurs	RCLFPU	PR, CS, T
LI Citizen ad hoc committees	As needed	RCLFP	PR, CS
LI ECA Operation Cmte meeting	Monthly	L	PR, CS, T
LI LACED	As needed	CP	PR
I UM radio show	Monthly	All	PR, CS
LI media meetings	Biweekly	RCL	PR, CS

R=Resident, C=Commercial, L=Large, F=Former, P=Potential, U=Competitor Utility; PR=Product, CS=Customer Support, T=Transactions

Figure 3.1-2 We use a variety of methods to listen to different customers and across customer life cycles.

We analyze ❷ customer data in a variety of ways, incorporating data into our dashboard reviews and SP input. One of our key listening processes is the biennial customer survey next scheduled for this summer. The survey segments responses by customer group (residential or commercial); location (Los Alamos/White Rock) and other demographics. This allows DPU to focus on where dissatisfaction occurs. In 2015, DPU included a Net Promoter Score (NPS) question to measure customer engagement (**Figure 3.2-5**).

Based on the first NPS analysis ❷, residential detractors were a younger demographic (aged 18-45), while the older demographic base (55 and older) were promoters. Using PDSA, DPU examined detractor data and found that their reasons for not recommending DPU included value, billing issues, credit card fees, outages/outage notification and website/online services. It appeared that the younger demographic desired more online control and information. This drove DPU to implement many specific improvements ❸ in the last two years, including updating web page design and layout and offering a smart mobile app allowing customers to access accounts, view usage and past bills and make payments online.

Fortunately, utility interruptions are greatly reduced due to the Electric Reliability Plan implemented in 2010 and continually updated. In the 2017 biennial survey, the question regarding outages was modified to determine how many customers actually had an outage, which revealed that reliability is so high it is now taken for granted.

Because we are a relatively isolated, small community, our employees listen to ❶ and communicate with customers as they attend sporting events, shop, volunteer and live in Los Alamos and White Rock. We learn community concerns through social media, reading letters to the editor, local blogs, listening at Council and BPU meetings and through interactions with the public at community events such as Kiwanis, Rotary Club, League of Women Voters and Sierra Club.

The most effective, impactful and actionable feedback we received has been from citizen ad-hoc committees 💡. The Future Energy Resources (FER) committee, for example, represents a cross section of the community (business, residential, DG/non-DG, LANL, male/female, Republicans/Democrats). We asked this committee to study and make recommendations of how to proceed at a critical juncture with industry changes in electric production and future energy resources. By being inclusive and transparent, the process provided credibility to final recommendations for a path forward and less resistance from the community and BPU. Most recommendations were adopted. These recommendations are still an input to SPP and budgeting and DPU reports progress quarterly.

3.1a2 Potential Customers Processes to obtain actionable feedback for former (F), potential (P) and competitor utility (U) customer listening are highlighted in **Figure 3.1-2**. Much actionable information comes from partnering with

LAC Economic Development (LACED) to identify what infrastructure new developers for housing or businesses might need. One of our employees, sits on a citizen committee to improve tourism and business (potential new customers). Our chief engineer partners with LACED for new affordable housing slated for development. Construction on a first project is currently underway in White Rock, a second project will begin in Spring 2019 and a third is under development. The local ski hill doesn't have adequate water to support development and snow making. If approved, DPU will oversee the construction of a new water delivery system and acquire another large water customer, ski tourism will increase (more utility use) and fire protection will be enhanced through new infrastructure.

3.1b Customer Segmentation and Product Offerings
3.1b1 Customer Segmentation DPU determines customer groups and market segments using industry standards of residential and commercial. We use customer data to anticipate changing product and service requirements such as use of NPS data to enhance website and SM access. We use customer data to anticipate future groups and segments' needs based on differing expectations for different demographics. Commercial customers are the key group to emphasize and pursue for business growth for several reasons. Commercial customers generate higher revenue and new or enhanced businesses may also mean new residents.

3.1b2 Product Offerings While product offerings are dictated by Charter, DPU continuously strives to improve sourcing (i.e. solar vs. coal) and delivery, (i.e., electric vehicle (EV) stations). We determine customer needs through listening (**Figure 3.1-2**), which provides input into SP (**Figure 2.1-1**). A key listening process for citizen input is through citizen committees, e.g. FER. Originally, FER provided a detailed analysis and review of requirements and provided specific input for how to best set a direction for carbon neutrality. The 2017 customer survey found overwhelming support (73% residential; 60% commercial) for the FER recommendation to pursue nuclear generation. This one-time event has evolved into a continuous process to determine changing customer needs and new markets and to create opportunities to expand relationships with current customers.

DPU identifies and adapts product offerings to exceed customer expectations through research, study and testing. For example, we partnered with Kyoto University, Japan, to conduct "dynamic pricing" research on residential customers. For this project, DPU installed 1600 smart electric meters in two neighborhoods. The research used virtual pricing and provided actual cash payouts to influence customers to shift electric usage to less expensive times of the day and avoid more expensive peak demand times of the day. No actual rates were adjusted; customers' actual bills were not impacted. The research results demonstrated that we will be able to move to dynamic pricing to manage electric load. By making it voluntary, we are expanding relationships ❸ with customers who are committed to the program.

Year	Customer Cycles of Learning
2014	FER citizen committee 💡
2015	Added NPS engagement to survey
2016	Smart mobile app 💡
2017	Improved power outage survey data
2019	Align survey to benchmark sources

Figure 3.2-1 *1 Learning cycles for customer engagement build long-lasting customer relationships.*

3.2 Customer Engagement
3.2a Customer Relationships and Support

3.2a1 Relationship Management Even though DPU does not compete with other utility providers for new customers or market share, we recognize the importance of building and maintaining strong relationships with our customer base through the entire customer life cycle. DPU's governance structure (**Figure 1.2-2**) is centered on local control, with county council ❶ comprised of customers and elected by customers, appointing customers to BPU ❷. As a result, DPU reports to and is accountable to its customers which places strong emphasis on customers. We are entrusted by LAC and its citizens to operate their DPU. As such, we believe that to build strong relationships we must be transparent, efficient and reliable with excellent customer support to meet the customers' needs for how they do business with us.

We acquire and build ❷ market share by partnering with LAC/LACED to provide infrastructure for new commercial and residential development (**3.1a2**). We enhance our brand image ❸ by listening to and incorporating VOC in our operations. We are their utility after all – and we aim to be an organization that the customer and community are proud of. Our brand is enhanced through the citizen ad-hoc process,

CUSTOMER SATISFACTION & ENGAGEMENT SYSTEM

Build & Manage	Approaches
Be Transparent	Publish quarterly & annual reports on the operation of the DPU (financials, project and division updates) Condition assessment to BPU
Be Efficient	Good stewards of all assets & revenues via AMTs, budgets, audits
Be Reliable	Dashboard reviews monitor reliability of all services
Be Excellent	Knowledgeable, courteous, handle the request, customers is satisfied with service

Figure 3.2-2 *We build and manage relationships through trust, efficiency, reliability and excellence.*

such as FER, that results in their values being integrated into SP. An example is the goal to be carbon neutral by 2040, an objective more progressive than the Paris Agreement of 2015 to combat climate change.

We retain ❸ customers by meeting their requirements. We measure knowledge, courtesy, ability to handle a request and satisfaction when customers interact with us. We know that if we are doing our job, utilities are invisible. Customers should never wonder if a) lights will turn on when they flip a switch; b) water coming from the tap is safe to drink; c) their house will be kept warm in the winter and d) wastewater going down the drain and leaving their homes will be safely collected and treated to protect the environment. These are basic expectations that we meet daily. We exceed expectations through innovative sourcing, production and delivery, such as reducing our reliance on coal-based electricity and the inception of smart meters and online capabilities for the convenience of customers.

Attending to customer life cycle with a stable residential and commercial base means supporting all demographic segments. The 2018 US Census estimates that 38% of our customers are 55 or older. This is the segment that responds to landline phone surveys, skewing results. We falsly believed that all customers were greatly satisfied with paper bills and sending payments by US mail. After changing the outreach to include email and text messages, younger customers responded. Results were segregated and we saw some services were less satisfactory for a portion of customers. In response, DPU launched a smart mobile app for customers to conduct business with us online.

3.2a2 Customer Access and Support DPU enables customers to seek information and support in a variety of ways based on feedback from older and younger residential and commercial customers. For the 1600 smart meter customers, online access allows them to view consumption patterns in 15-minute increments, compare consumption with neighbors and even set up alerts when consumption goes above or below their target threshold. Knowing electricity consumption allows customers to better budget for upcoming bills. DPU is now expanding this service to the rest of its customers and incorporating gas and water consumption through the AMI project.

A key DPU component of information and support is the Customer Care Center (CCC), staffed Monday through Friday from 8 a.m. to 4 p.m. for personalized support for walk-in customers, phone calls, and email traffic for not only all utility business, but also county business. The CCC is located at the Municipal Building in downtown LA. Service windows in the central lobby provide easy access to customers and citizens. Through the smart mobile app, customers can also ask questions and request information. Three DPU staff members monitor the messaging portal and respond to incoming messages within one business day.

When customers experience a natural gas, water or sewer emergency, they are connected immediately with standby crews available 24/7 and there is no charge incurred to respond and render the situation safe. Customers may also

Key Support & Communication Methods	Res	Comm	Partner SH
Conduct Business			
CCC (in person/phone/email)	√	√	√
Smart mobile app	√	√	
Contract/ECA			√
Smart meters	√		
Seek Info & Support			
CCC (in person/phone/email)	√	√	√
Smart mobile app	√	√	
Website	√	√	√
Social media	√	√	
Communicate			
CCC (in person/phone/email)	√	√	
Bill/newspaper inserts; direct mail, flyers, posters, door hangers, letters	√	√	
Social media	√	√	
Smart mobile app	√		
Key Accounts meetings		√	√
See Figure 3.1-2	√	√	√

Figure 3.2-3 *Access and support are assured for all customer segments.*

seek information through the website. DPU recently migrated to a new website to be more customer friendly. Using website analytics, DPU was able to determine pages that were visited more often and information that was downloaded most by differing customer segments. Information available includes utility rates, bill inserts, quarterly and annual reports, information on each utility, staff, phone numbers, permitting information, codes and standards, rules and regulations. BPU agendas, minutes and video of meetings are also available on the website.

Social media is another means to support customers seeking information. DPU's Facebook page has a following of 700+ members; outreach is maximized by sharing this page to other community pages. Important information can be pushed this way, reaching thousands of younger customers and families.

Examples of targeted communication may include door hangers or letters to those adjacent to CIP projects or customers whose utilities will be interrupted during infrastructure upgrade or maintenance. A reminder robocall is made the day before project starts.

Recently, DPU implemented a new enterprise resource planning (ERP) software system. Advance information was made available to all customers through bill inserts, press releases, advertisements, social media and radio interviews. DPU invited landlords to a drop-in luncheon to learn about the changes, what to expect and to address the individual concerns or questions one-on-one 💡.

DPU has communicated important information that is targeted to the business community through the Chamber of Commerce. In 2017, DPU needed to close a state road

for a period of 24 hours, impacting traffic to White Rock (WR). After meeting with various stakeholders (SH), LAC, LAPS, LANL, Bandelier, Police and Fire to select a date that minimized the impact for most SH, the Chamber was able to notify all WR businesses. DPU followed up with one-on-one meetings with larger businesses. Customer requirements (**Figure P.1-6**) are determined through our LIO processes described in **Figure 3.1-2** and are deployed to CCC and field crews via MVV, SL communication (**Figure 1.1-5**), standard operating procedures (SOPs) and PPAs.

3.2a3 Complaint Management DPU does not have a formal policy/procedure for handling complaints. However, all DPU staff attended a customer service class hosted by LAC. In addition, the DPU Code of Ethics provides WF guidance on handling complaints in the areas of Trustworthy, Communicative and Fair (**Figure 3.2-4**). For managing complaints, these three enable us to recover customer confidence and enhance satisfaction and engagement.

Approach to Complaints
❶ Trustworthy: By giving correct and up to date information, we recover confidence. As part of the transition to MUNIS (ERP), we have had numerous systems errors in billing. We have proactively contacted customers before they receive their inaccurate bills, which shows them that we are on top of the issue and it is not up to them to detect or correct the error.
❻ Communicative: Complaint management is all about listening. The code reminds us to be "approachable, open-minded and willing to dialog," and includes "keeping customers informed" if immediate resolution is not possible.
❿ Fair: Fixing the customer issue is only part of complaint resolution. Courtesy and respect are fundamental to enhancing satisfaction and engagement and is inherent in problem resolution.
Step numbers refer to Figure 1.2-5, DPU Code of Ethics

Figure 3.2-4 *Complaints are handled in harmony with our Code of Ethics, Figure 1.2-5.*

Field and CCC staff are empowered to handle complaints promptly as they are encountered. CCC may waive a late fee or adjust a payment plan. Most complaints are handled and resolved in this fashion which recovers customer confidence in DPU. If customers are still unsatisfied, the complaint is elevated to supervisors or senior leaders (SL). Receipt of complaint is acknowledged within 24 hours. Most complaints are effectively resolved in a few days. If longer, we follow up with the customer to advise them of when to expect resolution. Complaints and resolutions are shared with other DPU staff who can also learn from the incident.

3.2b Determination of Customer Satisfaction and Engagement
3.2b1 Satisfaction, Dissatisfaction and Engagement DPU's primary method of determining customers' satisfaction and dissatisfaction is through the biennial customer survey with supplemental feedback coming from other sources such as communications through the CCC and field crews (FCs), emails, phone calls, social media and public meetings. Engagement is determined through NPS (**Figure 3.2-5**), which scores "likely to recommend" on a 0-10 point scale. The biennial survey uses four methods to engage different customer groups: phone calls, emails, SMS (text messages) and in-person interviews. Results are segmented by

commercial and residential; residential is further segmented by age, location and households with/without children. The Utilities Manager meets with large customers in person (key account meetings) to: understand what DPU is doing right and what could c better; ask if we are meeting the customers present and future needs and test future products (EV stations, community solar gardens). Results from surveys, feedback from key account meetings and other sources are collected and discussed through SPP. Feedback is examined and weighed against other SOs, long-term goals, available resources, revenues and alignment with MVV. If appropriate, actionable information is then folded into the SPP (**Figure 2.1-1**).
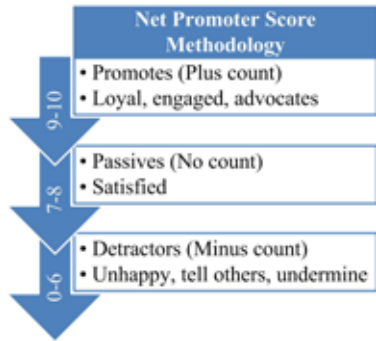
Figure 3.2-5 *Improving the quality of survey feedback provided compelling data for action.* *More information on NPS methodology and extensive segmentation data is AOS.*

3.2b2 Satisfaction Relative to Other Organizations DPU has set a customer satisfaction goal to achieve a mean score of 3.5 (above good) on a 4-point scale (1=poor, 2=fair, 3=good, 4=excellent). DPU also set a goal to achieve an NPS engagement score that is better than the industry standard which changes from year to year. In order to determine

satisfaction relative to competitors, customers of other organizations and industry benchmarks, DPU compares commercial and residential NPS with utility industry scores through the Tempkin Group. In 2017, DPU's NPS score for commercial customers was +34.7 which was better than the industry average. On the other hand, the residential score was +11.2, less than the industry standard. Using promoter/passive/detractor and 'heat map' analysis (AOS), we are able to determine where we need to focus improvements.

3.2c Use of Voice of Customer (VOC) and Market Data
DPU uses VOC such as citizen committees and market data as an integral part of SPP. SLs evaluate how VOC and market data aligns with MVV, other SOs and long-term goals to arrive at various initiatives. The SPP also weighs resources and available revenues with the benefits to then prioritize such initiatives, which ultimately changes products, services and delivery mechanisms. Our SP carbon neutrality goal that came directly from residential/ commercial/LANL VOC through FER is an example. We continue to replicate the FER success story to build a more customer-focused culture. In addition, our governing bodies (**Figure 1.2-2**) are entirely comprised of customers so their leadership and guidance are informed by VOC as well.

VOC supports operational decision making as we undertake repair and replacement projects. Whenever we plan a significant utility interruption, road closure, etc., we personally contact affected customers and seek their input to plan logistics of the work to minimize disruption. For operations with lower impact, we may use door hangers and robocalls to alert customers to utility interruptions.

4: Measurement, Analysis and Knowledge Management
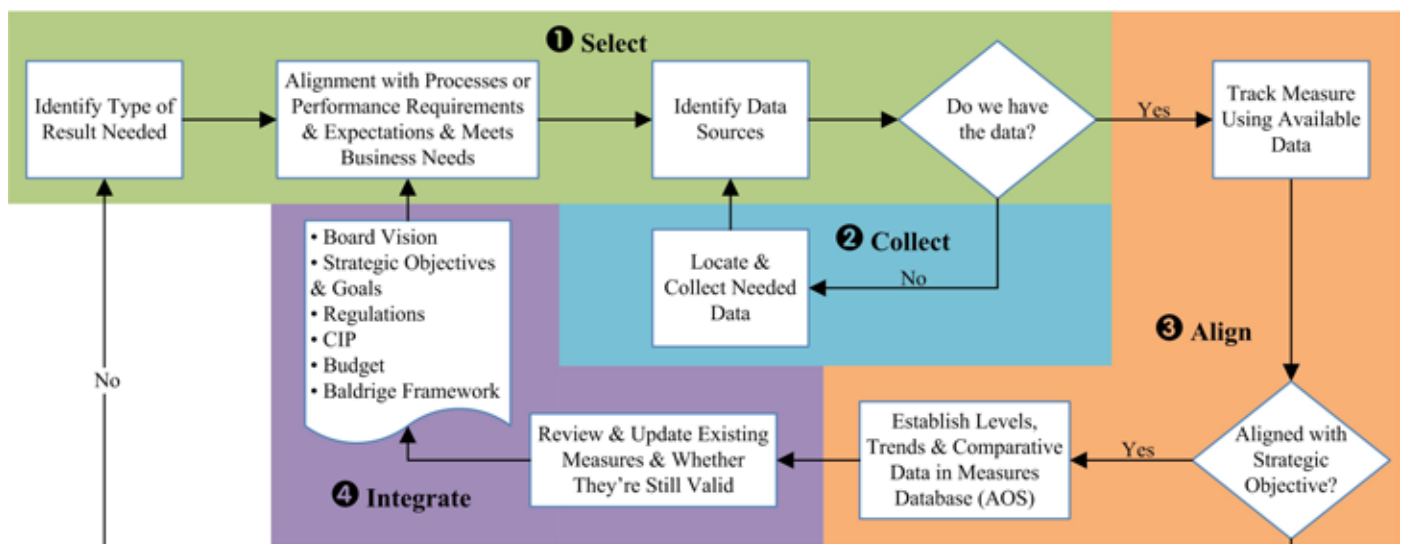
Figure 4.1-1 *Our Performance Measurement Selection System provides alignment and integration to SOs while ensuring we achieve appropriate regulatory and budgetary results.*

4.1 Measurement, Analysis and Improvement of Organizational Performance
4.1a Performance Measurement
4.1a1 Performance Measures We select, collect, align and integrate data and information to use in tracking daily operations and overall organizational performance using the

performance measurement selection system in **Figure 4.1-1**. This system provides the approach to select the appropriate measures by utility group and support areas. We select the type of measure needed based on efficiency, effectiveness and quality, then align with our business needs ❶.

Year	Cycles of Learning
2013	Began divisional dashboards for all utilities
2014/ 2019	5-year Mgt. audit based on Baldrige framework (QNM Application)
2016	Added benchmarking to divisional dashboards
2017	MUNIS (ERP)
2018	Condition assessment to BPU (1 system/quarter)
2019	Use of Baldrige Award Recipient (BAR) data for benchmarking in dashboards

Figure 4.1-0 Learning initiatives are fully integrated with our Baldrige approach to leadership, performance and planning.

Selection is based on use and intent of the reporting for three key purposes: 1) Informational for the Board of Public Utilities (BPU), Council and the public; 2) Budgetary for staff and development of annual budgets, cost control and rate structure; and 3) Operational for staff in tracking performance, response to changed conditions, problem detection, operations realignment or reprioritization.

Data sources are identified in MUNIS (ERP tracking system and financial application). In 2017 this new system was installed based upon a LAC decision to upgrade technology and improve applications. We used the PDSA system to integrate the new MUNIS functionality into DPU processes with the goal of increased accessibility of data for users. We are testing a secondary performance tracking tool, Clear Point System (CPS), recommended by the City of Ft. Collins, a 2017 Baldrige winner. We are integrating CPS across all utilities. CPS uses dashboard data and graphs and integrates that data with SP objectives and goals (**Figure 2.1-4**). This provides a system that delivers information on organizational performance.

When data is available, it is collected ❷ from various internal department sources that have been developed over the years. These include consumption reports; actual to budget monthly reports; annual utility reports; financial fundflo reports; DOT/ PHMSA (gas system regulatory reporting) reports; NMED

& EPA permit reports (WT & NP reuse); NM Office of the State Engineer (NMOSE) WP reports; utility locate report and informal record keeping by supervisory staff. If data is not readily available, we locate and collect it along with data that we have.

We align data with each operational unit by utility group ❸ and integrate with the six SOs from **Figure 2.1-4** (Operations and Performance, Financial Performance, Customer and Community, Workforce, Environmental Sustainability and Partnerships) in ❹. With our various internal department reports being the fundamental source, our dashboards are the tools used for aggregating information for other reporting such as quarterly and annual reports to the BPU and Council and Asset Management Team (AMT) annual governance meeting presentations (preparatory to annual budget development).

Dashboard data is aligned in two ways. First for operational data by utility: Electric Production (EP), Electric Distribution (ED), Gas Distribution (GD), Water Production (WP), Non-Potable System (NP), Water Distribution (WD), Wastewater Collection (WC) and Wastewater Treatment (WT). We also have administrative data by department as appropriate for Finance and Administration (F&A), Engineering (ENG), GWS Admin (GWS) and Public Relations (PR). Some approaches for the design of the dashboards vary by department as appropriate (required) to meet the needs of the users of the data. Dashboards are deployed and integrated through segregation and storage in separate folders on network drives for easy access for the workforce to assess overall organizational performance. Key organizational measures, including financial, are shown in **Figures 6.1-2** and **6.1-3**.

Performance levels are established with appropriate comparative data determined in the comparative data and selection system (**Figure 4.1-2**). Performance against SOs and APs is tracked using approaches in **Figure 4.1-3** along with key performance measures (KPMs). APs are reviewed with the Utilities Manager (UM) monthly to assess progress and potential adjustments.
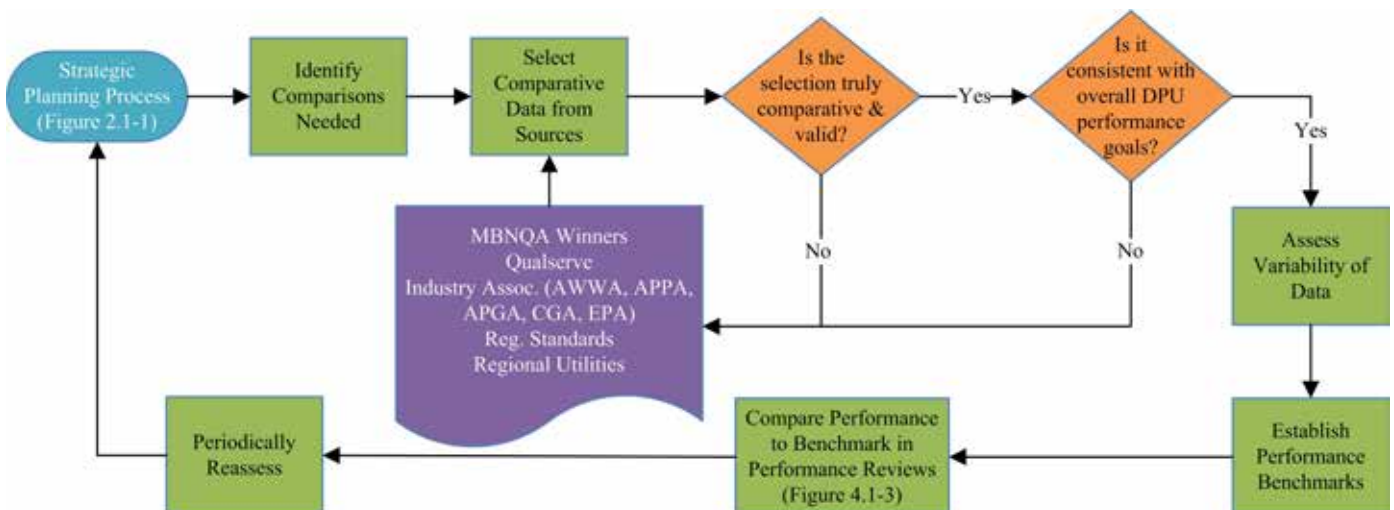
Figure 4.1-2 Our Comparative Data Selection and Use system provides us valid comparisons to assist in our assessment of our relative performance to our SOs.

4.1a2 Comparative Data To make fact-based decisions, comparative data are provided in the DPU's quarterly reports and used in performance reviews (**Figure 4.1-3**) as appropriate. Comparative data and information are selected from a variety of external sources including neighboring utilities, the Government Finance Officers Association (GFOA) and trade organizations such as the American Public Power Association (APPA), the American Water Works Association (AWWA) and the American Public Gas Association (APGA) using the approach in **Figure 4.1-2**. Internal data is developed through detailed discussion and teamwork and is selected to be relevant to the individual utility (Electric, Gas, Water, Wastewater) necessary to serve the local population where there may not be an external benchmark or comparison.

Selection of comparative data must take into account many factors. DPU is a small utility with 9,662 customers and does not have the economies of scale benefits of utilities in larger cities. The terrain and geography in Los Alamos, which is spread across four finger mesas, and with DOE and Pueblo lands separating one part of town by 10 miles, requires more infrastructure which results in higher per unit operating costs than a city like Santa Fe. Our sewer system has two wastewater treatment plants and 27 lift stations to serve about 18,000 people, while Santa Fe sewer system has one treatment plant and 4 lift stations for 83,000 residents. Care must be taken when choosing comparative measures to consider these relative differences. Effective use of comparative data is reviewed in SPP and dashboard measures. Rate comparisons are chosen to be most representative of neighboring communities which can be an average blended value of our neighboring communities. Comparative data for the customer survey is not available based upon our vendor's capability. We are in the process of determining the most appropriate sources and measures in FY 2020.

Performance Analysis & Use		Who								
Frequency/What		SMT	MM	NMS	ENG	F&A	PR	CC	AMT	B&C
Daily Safety (Job Tail-Gate)			√	√						
Voice of the Customer		√	√	√	√	√	√	√		
Operational Performance		√	√			√				
Social Media/News/Posts							√			√
Lab Sample Results			√	√						
Weekly Safety (OSHA Report)		√	√							√
Voice of the Customer		√	√	√	√	√	√	√		
Lab Sample Results		√	√	√	√					
Monthly Consumption Reports		√	√		√	√				
Operations Status Reports		√	√	√	√	√				√
Financial Reports		√	√	√	√	√				√
Utility Dashboards		√	√			√	√			
Quarterly Safety Committee Meeting		√	√	√	√	√				
Financial Meetings		√	√		√	√				
Quarterly Performance Report		√	√			√	√		√	√
System Condition Assessment to BPU (1 Sys/ Qtr)		√		√		√			√	√
Asset Management Team		√	√		√	√			√	
Annually Safety (OSHA Report)		√	√							√
SPP		√	√							√
Financial Statements		√	√			√				√
AMT Governance Meeting		√	√	√	√	√			√	
Annual Performance Report		√	√				√			√
Benchmark Updates		√	√	√	√	√	√	√	√	
All-Hands Meeting		√	√	√	√	√	√	√	√	
Drinking Water Report		√	√	√			√	√	√	√
Annual Gas & Public Awareness		√	√				√			
Annual Gas DOT Report		√	√		√				√	
Biennially Employee Satisfaction Survey		√	√	√	√	√	√	√	√	√
Supplier, Contractor & Collaborator Survey		√		√		√				
Customer Satisfaction Survey		√	√				√			√

MM=Middle Management, NMS=Non-Management Staff, ENG=Engineering, F&A = Finance & Administration, PR = Public Relations, CC = Customer Care Center, B&C = Board & Council

Figure 4.1-3 *Our Performance Analysis System provides us the ability to review our performance and make needed changes to meet our stakeholder needs.*

4.1a3 Measurement Agility We ensure that our performance measurement system can respond to rapid or unexpected organizational or external changes by reviewing key performance measures for relevance annually as part of the SPP and budgeting process. Dashboard measures are also reviewed during SPP and, as necessary, the relevance of dashboard measures is considered during monthly discussions between the UM and Deputies. New measures may be developed in response to BPU, Council or operational concerns. Issues, concerns, and regulatory changes that arise are identified in weekly/monthly department staff meetings and are elevated to UM in monthly progress meetings held with each Deputy as appropriate. If needed, an action plan is developed and deployed to appropriate staff or AMT. Necessary resource allocation decisions are recommended by AMTs.

4.1b Performance Analysis and Review We review our organizational performance and capabilities using the methods indicated in **Figure 4.1-3**. Approaches used in reviewing organizational performance and capabilities are monthly consumption reports, monthly operations and financial status reports, job costing reports,

dashboards, quarterly and annual reports. Master plans, Electric Reliability Plan and the five-year management audits are published per DPU's charter requirements. Development (approach) and deployment of these plans/reports have evolved and improved over the last several years. As internal processes and procedures are found that need improvement, DPU forms interdisciplinary teams to review and evaluate procedures for improved efficiencies. PDSA is used, as appropriate, based upon the complexity of the improvement. Action items are assigned and tracked by SMT. The Performance Planning and Appraisal (PPA) process is used to track that staff incorporates and deploys key process changes.

We analyze performance to support these reviews by identifying current performance levels and recognizing trends of KPMs identified in **Item 6.1** (Are we improving, staying the same or getting worse?). We compare performance to goals and benchmarks. We integrate results into our decision-making process to ensure conclusions are valid.

Organizational success is determined based on how well DPU performs compared to other utilities across the country through national standard comparisons. Competitive success is assessed based on comparison of rate and budget growth of DPU utilities compared to other utilities across the country through national standard comparisons and compared to other New Mexico utilities through regional rate comparisons.

Financial health shorter-term (ST) (10-year) financial models have been developed for all utilities. These models include projected rates, rate adjustments, cash reserves by category and, of course, projected sales, expenses and revenues. Longer-term (LT) (20-year) financial models have also been developed for two utilities (WD & WT). LT financial models include the same data sets as ST models; however, they include graphical representations of revenues, expenses and a comparison between the projected and expected cash balance reserves by the financial goals developed by BPU. A cross-divisional team is being established to integrate a single set of models available to all users.

Our Performance Analysis system is comprehensive and integrated to SOs and goals and is deployed to all stakeholders (SH). SHs can assess where we are and what we need to do to learn and improve organizational success. Analysis performed to support these reviews include capacity and condition assessments which are comprehensive evaluations of electric, gas, water, and wastewater infrastructure. These assessments are reviewed and updated as part of the AMT process (**Figure 2.2-1**) which continues to be developed and has been through multiple cycles of improvement (**Figure 2.2-1**). The goal of AMT is to help achieve SOs and provide utilities at a competitive cost. One area of asset management is ensuring adequate maintenance is performed to preserve, protect and prolong life of the utility's infrastructure. In the past, asset management was not consistent across divisions and typically relied on third-party reports such as system-wide condition analysis. Performing assessments in-house gives our operations personnel the knowledge they need to perform work or propose CIP projects.

We compare levels and trends using year over year data and multiple year trends for KPMs. KPMs are discussed in detail with BPU and Council. All KPMs are discussed quarterly with AMTs and annually for the governance meeting during budget preparation. Reviews and analysis are integrated with the six SOs and APs from our SP. Reviews of operational performance, the voice of the customer and social media provide us the ability to respond rapidly to changing organizational needs and challenges.

BPU reviews organizational performance in a quarterly Condition Assessment. We present our progress meeting the SOs and APs and other performance as requested. Key items reviewed at every board meeting are Electrical Reliability (SAIDI), Outstanding Receivables and OSHA incident reports. Detailed discussions include continued relevance of data to the mission of the individual utility. Financial data is compared to condition data to verify if the assumptions made regarding condition improvement for the financial expenditures are meeting expectations. These analyses are being built into the ongoing Geographical Information System (GIS) upgrade project reporting programming by including reporting on both financial net present worth, condition (physical and capacity) and age that also include an element of risk (or critical infrastructure) assessment.

4.1c Performance Improvement
4.1c1 Future Performance We project future performance through AMTs and the 10-year financial plan. Findings are compared to the performance goals and benchmarks established in the SP. When forecasted results differ from the SOs and action plans, we evaluate what improvements may be necessary to reconcile the variance and improve future performance. Projections are adjusted as appropriate. For example, as gas sales trended downward, sales projections have been adjusted downward. Future budget sales projections may again be revised based on data analysis.

Comparative and competitive data are used in our annual budget projections. We review projected budget versus actual sales volumes. For example, water sales volumes were overly optimistic in the early 2000s and as such, so were revenue projections. CIP expenses were planned based on the projected (optimistic) revenue and led to deficit spending and depletion of cash reserves. Including sales volumes in KPMs provided visual analysis that highlighted the need to revise water sales projections downward which has helped to stabilize the water fund cash balance reserves.

4.1c2 Continuous Improvement and Innovation We use findings from the performance reviews in **Figure 4.1-3** to communicate to our work groups how we are performing. Any gaps identified are a catalyst to define priorities for business process improvements and provide opportunities for innovation. The innovation inventory (**Figure 7.1-25a**) records our innovation through time. When a gap from operational performance reviews is identified, we ask work groups and functional levels to provide ideas to improve performance using PDSA. DPU employees are empowered to directly resolve customer concerns.

A cross functional, interdepartmental team innovation occurred in WD. Water breaks per 100 miles were above the national standard. The Fire Department (FD) was unintentionally over-stressing fire hydrants and breaking water lines. UM and the FD Chief met to develop a plan to overcome this problem. DPU now teams up with FD personnel to perform fire hydrant checks. DPU operates the valves while FD does hydrant flow tests. Water breaks per 100 miles have decreased significantly (**Figure 7.1-8**).

Our UM's vision of innovation is included in our SPP and was the focus of 2018 planning. The Innovation system is shown in **Figure 6.1-5**. That vision is focused on improving data reporting and accuracy and pushing the organization into innovative solutions to improve overall performance and create new value for customers and stakeholders. Implementation of AMI to provide meaningful change to the meter reading process is an example of innovation. This approach will meet one of our customer key requirements of accurate billing. With the AMI installation electricity, gas and water use can be transmitted electronically. This will also improve our ability to get access to data, be more accurate and provide better and more timely information to support operational performance, as well as identify water leaks and power outages sooner.

Deployment of priorities to suppliers, partners and collaborators is individualized based on the particular relationship between the supplier/partner/collaborator and the DPU utility or division relying on the relationship. We recognize and emphasize these relationships, knowing they lead to improved efficiency and effectiveness in our SPP.

4.2 Information and Knowledge Management

Year	Cycles of Learning
2008	Baldrige Journey Began
2015	Policy & Procedures Group Implemented
2015/2018	GIS Program Upgrades
2017	MUNIS
2019	Organizational Learning System created

Figure 4.2-0 *Cycles of learning to collect, analyze and transfer knowledge*

4.2a Data and Information
4.2a1 Quality To verify and ensure the quality of organizational data and information, DPU safeguards and improves the value of data, information, and knowledge (collectively "data") through use of a Data Quality Management Program, in **Figure 4.2-1**.

We work collaboratively to document key data quality requirements for a particular data set ❶, including; key
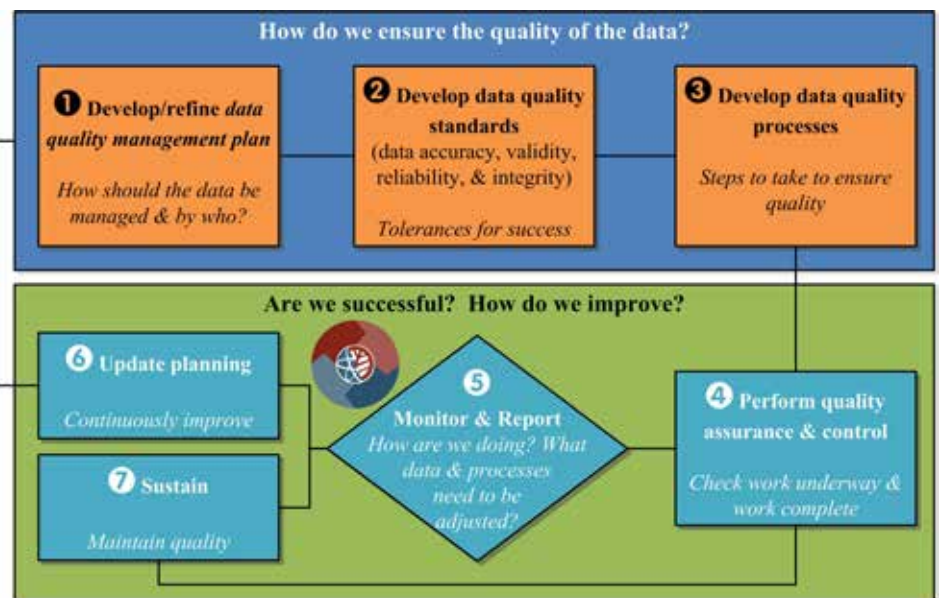
Figure 4.2-1 *Our Data, Information and Knowledge Quality System ensures quality of organizational data and information we use to meet strategic objectives and goals.*

data components, criticality, accuracy, validity and impact of data on our operations. This step also examines: level of granularity that we should address, how data errors are categorized, business rules and processes that measure data errors and iterative reporting processes on data quality. We compile data quality requirements ❷. We also ensure quality of organizational data and the information ensures accuracy, validity, reliability and integrity through compliance with standards, field verification and a series of manual and automated quality checks. Electronic and other data and information are managed to ensure accuracy, validity, integrity, reliability and timeliness by DPU and the entire County. The recent transition of the ERP software from Cayenta to MUNIS was a mandated change that will provide for a more robust approach to management of this organizational knowledge. Financial information is audited annually through a county-wide process to ensure accuracy. Any revisions that occur during these audits are transferred to the retired FY dashboards that link to the dashboards that are used to develop KPM graphs used for reporting and analysis. All data, MUNIS & GIS, is backed up daily by LAC Information Management (IM or IT) to ensure availability and reliability.

We ensure that organizational data and information is current through turnaround time standards ❸. We monitor data at specific milestones in business processes to verify compliance with established data quality standards and processes ❹. For example, GIS data was being edited by numerous staff and edits were being made that were found to be inaccurate in the field. DPU changed the GIS data revision system to limit the number of people authorized to edit data down to certain specific individuals trained in both editing procedures and in the importance of completing edits based on the revised system.

Outputs from data quality monitoring ❺ are reported and used by the utilities to identify areas for improvement. ❻ As part of the revised system for tracking GIS changes, field crews (FCs) document infrastructure discrepancies on utility

maps with what they find in the field (such as location, size, type, etc.). These documented discrepancies are reviewed by a member of the supervisory team and forwarded to the GIS staff to edit and incorporate into the GIS data set. ❼ Data quality requirements continuously improve through detailed reviews and iterative business process refinements. Financial data sources for FY dashboards are reports developed over the years and used throughout the DPU; Consumption, Budget to Actual, Annual Utilities, etc. After the end of the FY, dashboards are retired and the data is linked to an expanded Annual Comparison Summary (ACS)dashboard and made available to the Clear Point System. This data is known to change after the FY is over, sometimes 6 to 9 months later, due to audit findings. Deputies are tasked with verifying the previous year's expanded dashboard data as they are entering the latest FY's retired dashboard data. This way, the multi-year trending is as accurate as possible.

4.2a2 Availability All data and information availability start with what is needed (called Requirements in **Figure 4.2-2**) to meet the stakeholders (SH) requirements. We ensure availability of organizational data and information by emphasizing system reliability and employing a wide variety of information distribution methods to make sure the users of the data including the WF, suppliers, partners, collaborators and customers have access to their needed data at all times. Our WF accesses data through multiple user-friendly applications available through our secure network when onsite and through a virtual private network (VPN) when in the field or working remotely.

Figure 4.2-2 also illustrates the wide variety of data available to customers through our website, emails, CCC and traditional and social media. Suppliers gain access to data through the same means as well as industry conferences, phone and face-to-face meetings. Regulators establish their data requirements through permitting and other compliance processes and we fulfill those requirements (**Figure 1.2-3**).

To ensure our systems are user-friendly, DPU solicits feedback for continuous improvement from the above list of data users through surveys, emails, calls and requests. If appropriate, our protocols escalate VOC data and WF feedback to the senior management team to initiate the PDSA process. We also provide convenient links to our social media outlets in our external communications to facilitate feedback from customers.

Through an exclusive DPU drive, staff has 24/7 access to reports and data sets developed over the years and all dashboards as soon as the data is posted. County-wide financial reports, budget books and annual audits are stored on LAC's intranet Finance page for access by any DPU staff. Customers have access to data relevant to them through three customer portals: 1) smart mobile app; 2) Advanced Metering Infrastructure (AMI) portal (under development); 3) County-wide MUNIS customer portal (also under development).

4.2b Organizational Knowledge
4.2b1 Knowledge Management We systematically build and manage organizational knowledge through our utilities, including customers, WF, partners/suppliers and other key SHs. Data are stored in managed IT systems for structured data and on file servers for other electronic documentation such as word documents, emails, presentations, memos, reports and other unstructured information.

Users	How We Determine Requirements	Type of Data / Information	Availability
Workforce	Strategic Plan/Objectives & Goals	Performance Metrics/ Dashboards	Internet/ County Intranet Web Portal/Wall Charts
	Master Plans-Gap Analysis	ERP – MUNIS	Drive
	Regulatory Compliance	Regulatory info–LAB SCADA	email
	SOPs/Policies	GIS Spatial Data	Mobile Applications
	AMTs	Financial / Data	24x7 Remote Access
Customers	Emergency communications	Electronic Transactions	Website/email
	Account information	Account information & usage	Smart mobile app/AMI/ MUNIS Customer portal
	Satisfaction Surveys	Outreach	email/Customer Care Center
	Outreach - sponsored events	News	Print/Radio/TV Social Media
Suppliers/ Partners	Contracts	eProcurement Portals	Website
	Solicitation documents	Product Reviews	email
	Agreements/Contracts/POs	Project Data	Electronic Communications, Conferences, Phone, Meetings
Collaborators	Informal Communication	Survey Responses	email
		Product Reviews	Meetings
		Lessons Learned	Phone
		Industry Expertise	Presentations/Articles
Regulators	Permits / Regulatory Compliance	Reports	Internet

Figure 4.2-2 Our Data Needs and Availability System provide a comprehensive approach to determine the key requirements and deliver the data and information to all users.

Data from our knowledge groups are then correlated and blended through business analytics to build new knowledge and insight. We increase the value of our knowledge through knowledge transfer. The transfer and sharing of knowledge within DPU and with our SHs (**Figure 4.2-2**) promotes collaboration, transparency and diverse perspectives related to the evaluation of knowledge and data-driven decisions supported with knowledge. We use specific tools, techniques and standard operating procedures (SOPs) to include knowledge in our strategic planning and innovation processes. The SPP incorporates knowledge in the review and update of SP for both short and long-term business needs. For example, we engage with BPU to update the long-term vision for DPU. We obtain customer feedback through satisfaction surveys and seek new ways to improve the

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customer experience. We also receive WF input through engagement surveys. Our culture of innovation affords us the ability to anticipate and respond to rapidly changing business needs identified as strategic opportunities.

4.2b2 Best Practices We systematically share best practices through multiple approaches, both internally and externally within the organization through the communication methods in **Figure 1.1-5**. We identify external organizations that are high performing by comparing their results to our KPMs. For example, Baldrige award recipients (BARs) are found to be high performing. We have incorporated best practices from Ft. Collins, a BAR. Best practices are formalized in our SOPs so performance is consistently measured. Safety related best practices are shared through the Quarterly Safety Committee (QSC). Accidents, incidents and near misses received are analyzed in the meetings. If it is determined that a formal procedure is necessary, the appropriate Deputy is assigned the task to develop and promulgate the new SOP. The SOP is deployed on the DPU intranet. If no formal procedure is deemed necessary at the QSC meeting, then each member of the Safety Committee is responsible to discuss the accident, incident or near miss with the WF staff at the next available weekly group meeting.

When dashboard performance measures in the reviews shown in **Figure 4.1-3** reflect high performing work of a particular organizational unit or utility division, they are communicated at the annual AMT governance meeting. Key performance data considered valuable by that particular sub-group can be sources of information that are the catalyst for additional organizational learning and process improvement. We learn from our WF by asking for their feedback in the employee engagement survey (i.e., information they need but don't have) so that we can make the needed changes as appropriate.

4.2b3 Organizational Learning As we improve our SOPs and systems, we use our knowledge and resources to embed learning in our operations. When we change a process, the entire organization learns when to use the new approach. Focusing on our core competency of accountable management, we always strive to improve. DPU does not want to operate only on memory and tribal knowledge. When suggestions to an SOP or system is considered (**Figure P.2-3**), the first step is to see if the approach needs to be updated or improved. **Figure 4.2-3** indicates our organizational knowledge learning cycle. The approach is based on determining the data and knowledge available ❶, using the Performance Measurement Systems ❷ and the Performance Review Systems ❸ we determine if Learning or Improvement is needed ❹. If so, the SOP is updated using PDSA ❺ and the changes are stored on the server and emailed, as appropriate, to the owner who trains or re-trains. This utilizes the knowledge and resources to embed learning in the way we operate and promotes learning as part of daily work. When a process is improved and innovated, it becomes part of an SOP or the key work systems and processes in **Figure 6.1-1**, which are also improved through the PDSA process. We also learn from customers, suppliers and collaborators at regular meetings, via social media and through external website.

As DPU learns and improves using the Baldrige Performance Excellence Framework, we put more emphasis on our Organizational Learning System as an emerging critical system.

ORGANIZATIONAL LEARNING SYSTEM
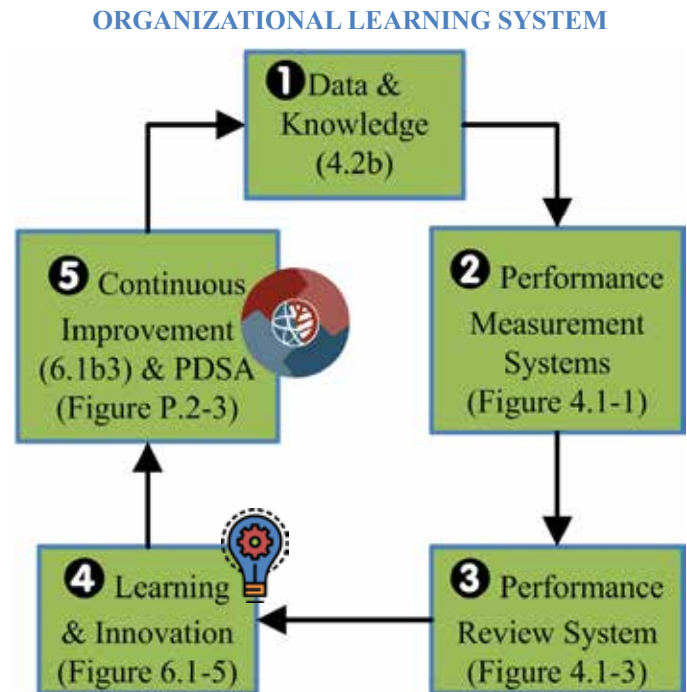
Figure 4.2-3 *DPU organization learning system is aligned with key elements of our LS (Figure 1.1-1❻) and capitalizes on our culture of innovation and PDSA.*

5: Workforce
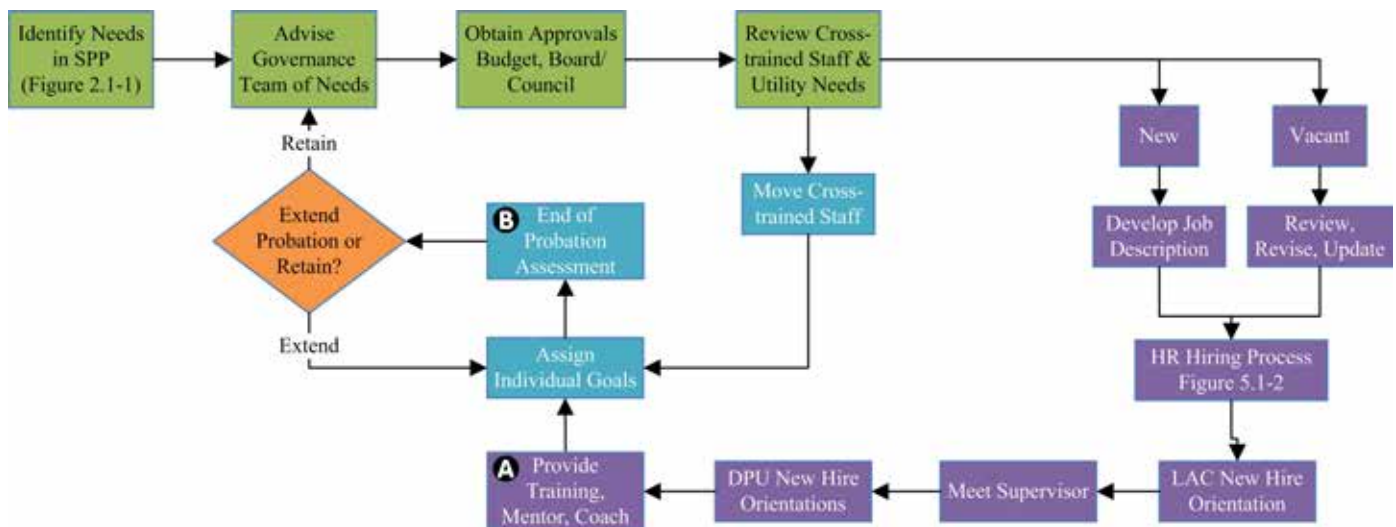
Figure 5.1-1 *Workforce Capability and Capacity is a systematic process to ensure that annual strategic goals and workforce needs are met.*

Although DPU does not have complete autonomy regarding workforce policies, benefits, compensation, etc., SMT has consistently worked with LAC to gain approval for variances deemed necessary for efficient operations of a complex and diverse utility. While some cycles of learning regarding the workforce were approved and implemented by LAC, DPU has implemented cycles of learning in response to the employee engagement survey results and specific to the services that they provide.

Year	Cycles of Learning
2014	GWS Weld Inspector in House
2014	Pipeline Assessment Inspector in House
2016	Critical Skills Matrix deployed
2018	Field Crews attend AMT

Figure 5.1-0 *Cycles of Learning have helped DPU retain and engage employees.*

5.1 Workforce Environment
5.1a Workforce Capability and Capacity
5.1a1 Capability and Capacity Needs Determining workforce capacity and capability needs begins with the Strategic Planning Process (SPP) (**Figure 2.1-1**). DPU further assesses workforce (WF) capacity and capability as part of the Asset Management Team (AMT) process. During the budgeting process, each division evaluates how staffing needs can be met based on the department goals, CIP projects and maintenance needs using regular staff, contracted help or temporary staff. The UM strives to keep the number of positions constant to keep utility rates competitive (and has never experienced a forced reduction in WF) as it is extremely difficult to get LAC approval for additional manpower. To meet strategic plans and keep the same count of fulltime employee (FTE) positions, SMT evaluates current positions and changes responsibilities or reclassifies FTEs. Retirements create openings for new positions. Seasonal needs are met by engineering student interns and temporary employees who work under direction of a trained DPU staff member on labor

intensive projects. DPU may conduct a job description and position classification through the application review and selection process when SMT feels it is appropriate.

Public utilities are highly regulatory industries and WF is required to be certified in a number of areas. DPU ensures that all staff attain and maintain required certifications and any compulsory continuing education and reimburses them for expenses. GWS staff maintains certifications and skills in gas, water and sewer utilities which enables employees to easily change functions to meet changing needs. Water and wastewater operators must hold NM water Quality Control Commission certificates to safeguard public health. Gas and water distribution and production crews hold welding, back flow prevention and other certificates for higher-level positions. Some certifications are monitored in the Energy Worldnet dashboard.

Competencies are determined by SWOT analyses as part of the SPP. Customer service skills of courtesy, resolution of problem, promptness and knowledge are determined by point of service and biennial surveys. Common competencies for all staff are: Customer Service, Skills/Technical Competency, Organizational Behavior, Initiative, Self-Management, Quality of Work and Leadership/Management Behaviors which have specific behaviors described. Our asset management program requires employees who perform work functions in the field be involved in planning, design and budgeting of O&M or CIP projects, which promotes performance improvement, improved job skills and reinforcement of new knowledge. For new or changing positions, a matrix of critical duties/skills is created. Cross training takes place in all divisions, developing staff redundancy and providing coverage. As a cost-effective measure, outside contractors may be used for infrequently needed skills. DPU uses an on-call contract bid to have quick access to contracted labor, equipment and skills that are either tied up on other projects or not available in house.

5.1a2 New Workforce Members DPU utilizes LAC's standardized recruiting and hiring processes (**Figure 5.1-2**).

HR recruits using local and area newspaper advertisements and postings on the LAC website. At the discretion of the hiring manager, the search can be expanded through professional organizations or publications.
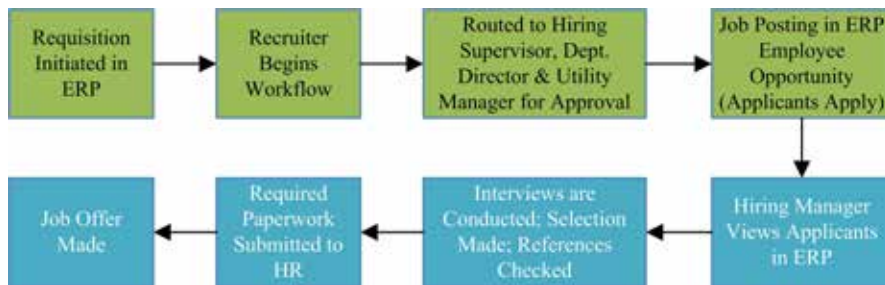
Figure 5.1-2 *Hiring Process is a collaboration between LAC HR and DPU*

At job interviews, we emphasize our customer service focus. We look for those qualities in candidates. As part of onboarding, we provide mentors **(A)** to demonstrate desired behaviors and continue to monitor during the probationary period of hire. An assessment is completed at the end of the probationary period to ensure the fit of new hires still meets organizational culture and requirements of the job **(B)**.

The LAC community is made up of well educated, white collar residents. DPU ensures its WF represents the diverse ideas, cultures and thinking of our customer community through MVV and Code of Ethics (**Figure 1.2-5**) which are emphasized in the DPU employee orientation. Each item in the code mirrors our community as employees are expected and encouraged to be trustworthy, professional, service-oriented, fiscally responsible, organized, communicative, collaborative, progressive, innovative and fair. As a result, DPU's WF thinks outside the box and are supported in making suggestions and changes that address the needs of DPU and its customers. Knowing that our community is sensitive to protecting its history and the environment, WF makes decisions in the field that go a step above normal work protocol. Examples of innovative decisions made by DPU WF that exemplify this are: 1) Boring, rather than trenching, underground utilities to protect historical landmarks and 2) Partnering with the LAC's solid waste department and the Department of Energy to cap the landfill and build a 1 MW solar array, thus converting a brownfield (land with no purpose) into a greenfield that produces renewable energy. DPU encourages the WF to become involved in civic and local groups to engage, communicate and listen to the diverse ideas and cultures of our customer community.

5.1a3 Workforce Change Management DPU is staffed with qualified and proficient employees who manage and organize the WF to meet our challenges, achieve our action plans and capitalize on the organization's core competencies (CCs). WF needs are determined through the SP and budgeting processes and AMT program. DPU maintains and updates DPU Continuity of Operations Plan (COOP) that outlines essential functions, personnel and equipment along with emergency contact lists.

DPU Engineering is represented on a LAC team comprising Utilities, Public Works and Engineering to coordinate all CIP projects among LAC departments. This coordination process enables DPU to construct utilities in advance of road paving to minimize costs and disruption to the community. Weekly staff meetings are used to discuss the work schedule, work progress, resources, etc. and to assess WF capability and capacity needs. If the work load exceeds its WF capability, the utility can utilize its on-call contractor to perform the work. Each division and its AMT plan CIP and O&M projects two years in advance plus a long-term, 10-year projection. Safety, quality work, customer service and ethics are primary requirements in completing DPU projects. Learning and continuous improvement is reinforced by the DPU Procedures Committee which ensures that all procedures are documented, discussed and improved during AMT meetings, staff meetings and strategic planning sessions.

DPU staffing is fairly static and generally does not have periods of WF growth or reduction. However, due to changing industry trends, DPU has had to make changes in its organizational structure and work systems. We prepare employees for these changes to prevent staff reductions through training, education and mentoring. For example, the utility industry is quickly moving toward AMI technologies. As a result, there will be a significant reduction in the need for meter reader resources. In anticipation of this future transition, DPU moved the meter reading function under the GWS division so meter readers could begin learning other aspects of utility infrastructure in the delivery of gas and water and wastewater collection. They are being prepared, trained and mentored in this new division and are given the opportunity to move into regular positions as available while they continue to read meters until this effort is no longer needed. Additional training on AMI will also be provided to two or three meter readers to trouble shoot AMI issues. The County would provide outplacement if they were required to downsize but that hasn't occurred. The meter reader example is what could be called "inplacement' as we ensure that staff have the training and skills to move into new positions when their current positions become redundant.

LAC recently implemented a new ERP. Our field subject matter experts (SME) were actively involved in the entire process. They contributed to the requirements definition to ensure that DPU's needs would be met. DPU SMEs and senior management (SM) were part of the selection committee and SMEs worked on the implementation plan.

5.1a4 Workforce Accomplishment WF is organized by divisions (EP, ED, WP, GWS, WW, F&A, ENG and PR). At an all-hands meeting, UM sets the tone for the year outlining the strategic goals and objectives. AMT meets quarterly and the first meeting is a Governance meeting including SMT. At this meeting, members work to understand the big picture and how individual scopes of work intermingle. The goals and objectives are translated into budget, staffing and resources needed, scheduling of work, timing and milestones by AMTs. The work is then scheduled for the WF during their

performance, planning and appraisal (PPA) sessions. Each AMT meets quarterly to review status and make adjustments as necessary. To improve understanding of the financial impact of AMT recommendations, Finance is represented on each AMT.

A mid-year review of PPAs is conducted by supervisors and reviewed by the Deputy. Deputies may have weekly and monthly meetings with their staff to ensure that work is moving on schedule. Monthly meetings are held between the UM and deputies to review work progress.

DPU's CCs are: (a) delivery of safe and reliable utilities services, (b) accountable management, (c) sustainability, (d) building customer and partner relationships and (e) employee development

    a. Employees are trained to respond quickly to changing situations like equipment failures or bad weather
    b. Employees are empowered to make decisions in the field and in the office
    c. Employees are encouraged to find diversified and innovative solutions to problems. For example, an employee used recycled crushed glass as emergency bedding for a pipe when we didn't have any sand
    d. The WF is encouraged to engage and interact with our customers
    e. DPU provides training, education, certifications, and development opportunities

To reinforce customer and business focus, DPU hires a WF that is customer oriented. Throughout the organization, posters foster business and customer focus. Customer cards and surveys are used to determine customer and business satisfaction.

Performance expectations are communicated with staff frequently. Staff is coached and given feedback during the PPA process. Deputies meet informally with staff to provide feedback, coaching, progress reports and other guidance throughout the year. Development and training opportunities are provided to ensure their success. SMT ensures that WF has the resources needed for success and successes are celebrated.

5.1b Workforce Climate
5.1b1 Workplace Environment WF health, security and accessibility are addressed through processes developed in the DPU Quarterly Safety Committee (QSC), strategic challenges (SC) and LAC Risk Department. Employee safety and health training is provided by the Risk Department. To improve the processes to track employee training, a Risk and HR training data base was employed which automates the processes and sends reminders to supervisors when the employee's training

Environment	Measures	Goals
Health	OSHA violations Safety violations	No Violations
Security	Breaches	No Violations
Accessibility	Facility inspections	No Violations

Figure 5.1-3 *The 2019 SP contains a specific safety goal (see Figure 2.1-4).*

is about to expire and handles enrollment for training classes. Since 2013, DPU administration, engineering and CCC staff are housed in a new Municipal facility located with other LAC departments. The new building meets accessibility needs and provides a safe work environment with security features: key fob access and "panic buttons" at CCC desks. All entrances, departments and rooms are identified in braille. Risk also maintains Emergency Action Plans of specific evacuation procedures and maps for the building and other LAC buildings. Designated employees for each group help the fire department account for all employees during an emergency facility evacuation. CCC and other DPU staff received "active shooter" training. In addition to accessibility needs provided in new office buildings, staff are offered limited duties when returning from an accident or illness and flexible work schedules are available. Comprehensive ergonomic evaluations of work spaces are available and ergonomically designed desks, chairs and special monitor screens are provided when needed.

Twenty-four/seven facilities have cameras. Pajarito Cliffs building has fencing, security gates closing nights and weekends, security wire, metal plates on doors and cameras tied to the standby room. Water production system facilities have Supervisory Control and Data Acquisition (SCADA) intrusion alarms. Hydroelectric facilities are fenced and alarmed, notifying dispatchers of intrusions. Staff must notify dispatchers every time they enter these facilities.

5.1b2 Workforce Benefits and Policies LAC offers a comprehensive benefits package including medical, dental, vision, long term disability and life insurance comparable with other employers in the area. (**Figure 5.1-4**) The process for determining insurance benefits was improved in response to employee surveys by creating a Health Insurance Committee with all LAC departments represented. This committee manages the survey process and makes recommendations for changes. LAC provides all full-time employees (FTEs) a generous tuition assistance program which may be supplemented by DPU. LAC is forming a new Employee Wellness Committee on which DPU will be represented. In addition to free use of the Aquatic Center (indoor swimming facility) and Ice Rink, the committee will look into other wellness/fitness activities and benefits for employees.

Many benefits and policies can be tailored. For example, employees are eligible to participate in three retirement programs. Benefits such as annual leave and stability pay bonuses are based on years of service. DPU offers some flexibility to meet employee work needs with approval of the supervisor and UM. For example, employees can work part-time for a limited period after maternity leave. DPU operates within the LAC Personnel Rules and Regulations which are reviewed and modified by the Personnel Board and Labor Management Committee with approval of LAC Council.

Benefits, policies and procedures are on LAC's website and are covered in new employee orientation. Benefits and policies apply to all employees equally so the electric distribution and gas, water & waste-water union contracts largely focus

Career Training & Development		Employment	Meaningful Work
•Training classes •Tuition reimbursement •Succession planning •Mentors •Coaching •Individual Development Plan •Cross training	•Supervisor Training •Certification /license reimbursement	•Online recruitment •Team-based selection process •Apprenticeship to Journeymen	•Regular feedback •Employee Engagement Survey •Benefits Survey •Cross-functional teams •Encouragement to solve customer issues themselves •Suggestions for improvement encouraged •Employees encouraged to invest their time & efforts in personal & professional development •Promoting from within

Health & Wellness	Services, Benefits & Compensation	Recognition & Celebrations
•Wellness Committee •Free wellness program; aquatic center & ice rink •Part-time work option post maternity •Light duties after accident or illness •Flexible work schedule •Fitness discounts	•Medical, dental, vision, long term disability & life insurance comparable with other employers in the area •State sponsored defined benefit program •Stability pay bonuses •Part-time work option post maternity •3 retirement packages •Annual & sick leave •10 paid national holidays •Personal day •Flexible spending •Medical reimbursement account •Dependent care reimbursement account •Tuition assistance •Retirement investment counselling	•Safety Employee of the ¼ (SEQ): Day off •Safety suggestions & SEQ nominees personal thank you letter from UM •Accomplishments recognized in County monthly update •LAC Employee Appreciation luncheon •LAC socials •Years of service & certifications recognized at holiday luncheon •All-hands meeting •Steak luncheon for entire workforce •Themed Spring event with potluck •Summer picnic •UM recognizes all staff successes at each event

Figure 5.1-4 *Workforce Services & Benefits support DPU staff.*

WORKFORCE SATISFACTION & ENGAGEMENT

Figure 5.2-1 *WF engagement is a systematic process to ensure retention of staff and encourage high performance.*

on yearly wage increase, over-time rules, rest period, and grievance procedures.

5.2 Workforce Engagement
5.2a Assessment of Workforce Engagement
5.2a1 Drivers of Engagement ❶ Senior leaders determine key engagement drivers as part of setting WF strategic goals ❷. Key drivers of WF engagement and satisfaction are validated through surveys which are segmented by division, gender, tenure, exempt and non-exempt. Originally, DPU participated in the LAC survey but switched to the Gallup survey in 2016. Key elements of the MVV (**P.1a3**) which affect WF engagement and satisfaction are: 1) Do you have materials and equipment to do your work right? 2) Do you have the opportunity to do what you do best every day? 3) Employee Engagement and 4) Has someone at work talked to you about your progress?

5.2a2 Assessment of Engagement One of DPU's formal methods to assess and measure engagement is the Gallup Employee Engagement Survey conducted every second year (**Figure 5.2-1** ❸). The survey results are shared at the all-hands meeting by the UM and reviewed with each division by senior management (SM) and posted on the intranet ❹. Two key issues in all divisions have been communication and participation in decision making. After the 2018 survey, an employee focus group was created to discuss the results, address the opportunities for improvement and submit a written

report to the senior management team (SMT). UM met with each division. One improvement resulting from the dialogue was an invitation to field crews to attend AMT Governance meetings in answer to their request that FC be included in decision making. In 2018, several FC members participated ❺. Due to the small size of our WF, these methods do not differ for groups or segments.

❻ DPU sets targets for, monitors and tracks via dashboards: voluntary and total turnover, grievances, sick leave and safety by division as other indicators of WF engagement. For all but safety, targets are set lower than Bureau of Labor standards and we use the OSHA target. The target set for Gallup results is 4 (Good) on a 5-point scale. DPU aims to rank in the top percentile of comparative groupings. Gallup indicates that engagement worldwide is at 32%; 42% of DPU's WF is engaged. While DPU encourages attendance at all meetings and events as an informal indicator, actual attendance is not tracked.

5.2b Organizational Culture To empower the DPU WF, we created an organizational culture that encourages open communication, high performance and an engaged WF through the Leadership System (LS) (**Figure 1.1-1**). Management and senior leaders (SLs) have an open-door policy and communication is promoted through the use of various meetings and discussions (**Figure 1.1-5**). SLs take an active role in motivating staff to reinforce high performance. Encouraging continuous learning contributing to high performance is one of the core values. The WF survey gives employees an opportunity to share their thoughts with management and encourages engagement as opportunities for improvement are dealt with.

Reinforcement of MVV is shown in **Figure 1.1-3**. DPU's culture is one of customer service, teamwork and collaboration and respect. SLs and management respect employees as they know that DPU's Vision is achieved through the efforts of the WF. DPU's Vision is to be high performing and provide diversified and innovative solutions. Ensuring that our culture benefits from diverse ideas, cultures and thinking of the WF is accomplished by: 1) supporting WF to achieve goals and work on career progression through the Performance Planning and Appraisal (PPA), 2) encouraging idea sharing, suggestions for improvements and participation in lessons learned, 3) involving those who do the work in planning, design and budgeting of projects and 4) empowering employees to solve customer problems. Employees are encouraged to apply 'out of the box' thinking and many enhancements have resulted as described in **5.1a2**.

5.2c Performance Management and Development
5.2c1 Performance Management Performance Management is grounded in DPU organizational culture ❶. DPU's performance management system (**Figure 5.2-2**) to encourage and motivate employees for high performance and utilize their full potential is facilitated by the annual PPA process and informal performance feedback opportunities ❷. Performance is rated for Customer Service, Skills/Technical Competency, Organizational Behavior, Initiative, Self-

PERFORMANCE MANAGEMENT SYSTEM
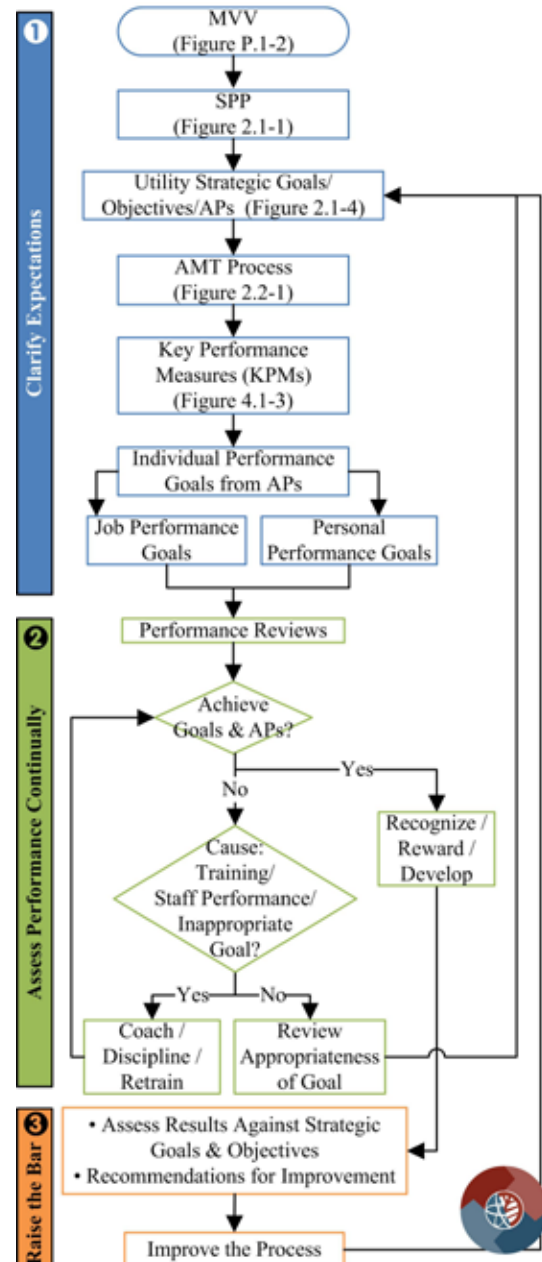
Figure 5.2-2 *DPU's Performance Management is a systematic approach to encourage and support WF high performance.*

Management, Quality of Work, Leadership/Management and specific Duties/Behaviors.

DPU is a customer services and utility services provider and teaches its employees to strive for excellence in both areas. Customer service starts by looking for customer-focused employee candidates and is reinforced as the key requirement for job success throughout employment. Several divisions including field crews and engineering were evaluated by customers and key partners during their customer/key contacts and field crew call-out surveys. These surveys and the survey process are currently under review as DPU determines how to improve them.

❷ Based on annual performance evaluation, raises (incentive) are now directly determined by employee ranking

to improve and reward employee performance. DPU has recognition programs and several recognition strategies and events as illustrated in **Figure 5.1-3**. DPU employees select a teammate as safety employee of the quarter who is recognized and rewarded with a day off with pay. High performers are incentivized with additional training and are most eligible for promotions. After 5 years of employment, staff annually receives stability pay if they have met their performance expectations.

Through strategic planning, high performance is directed by the PPAs ❸. The PPA system reinforces intelligent risk taking. DPU allows each member to innovate and "think outside the box" to ensure the end product offers customers the most cost-effective work design solutions. As described in **5.2b**, employees are empowered to solve customer problems and make changes and suggestions in an environment that encourages intelligent risk taking. Staff are encouraged to bring new training suggestions and requests to their reporting managers and often those requests are not only approved but a post training assessment is completed with the employee to see if other staff would benefit from the training. For example, LAC implemented a new ERP and an intelligent risk was taken by reducing the customer care front office staff from 5 to 3, allowing 2 staff to focus on learning the new billing system in the back office. The plan is to rotate staff from back office to front office until all 5 are proficient in the billing process. This was a risk because of the volume of calls the 3 front office staff are left to manage.

The performance management system supports a customer and business focus and AP achievement in ❶ and ❷. Customer and business focus is assured through SP.

5.2c2 Performance Development DPU's learning and development system (**Figure 5.2-3**) supports personal development firstly with the PPA where employees are asked to include a goal each for their professional and personal improvement. As part of PPA, staff are coached and new employees are mentored to ensure that their learning and development is reinforced. To support employee's development desires, DPU encourages them to suggest training opportunities for themselves and request tuition support. This is a formal process involving the submission of a request form which is approved by the Deputy and submitted to LAC. Tuition may be provided by LAC and supplemented by DPU. Training requests do not always have to apply to improving related job skills. As an example of intelligent risk taking, a plumber asked to take GIS training not related to his job, which was granted. He went on to design the mapping system for LAC, a key business result. Staff have been supported in getting Bachelors and Masters degrees. Employees are encouraged and supported to solve customer problems, make or recommend changes and offer improvement suggestions as detailed in **5.2b** and **5.2c1**. The PPA also supports organizational performance improvement and contributes to key business results as all levels of employees starting with the UM are focused on achieving their goals, which are based on Strategic Planning Process (SPP) goals and action plans. The apprenticeship program as described in **5.2c4** details how WF are coached and mentored.

As an organizational performance improvement example, a superintendent was certified as a trainer of the Pipeline assessment certification program (NASSCO - National Association of Sewer Service Companies). The Gas/ Water/ Sewer (GWS) deputy took an intelligent risk to have him certified resulting in a $645 savings/employee, contributing to business results.

All DPU employees receive Ethics training during orientation which is reinforced in all-hands and other meetings and discussions. They also receive Harassment training annually as treating each other and customers with respect is an ethics component. Fairness is one of our ethical business practices. As a result, staff weigh their decisions in handling customer problems based on fairness to all customers and not just the specific customer with whom they are dealing. As an example, a customer with a water leak receives a huge bill and while it would be nice to excuse that customer of the charge, that would result in other customers ultimately sharing the cost. As a result, the charge stands.

Ethics are part of continuing education required to maintain CPA and Engineering licenses and certifications. In consideration of customer (ethics) and as intelligent risk

LEARNING & DEVELOPMENT SYSTEM
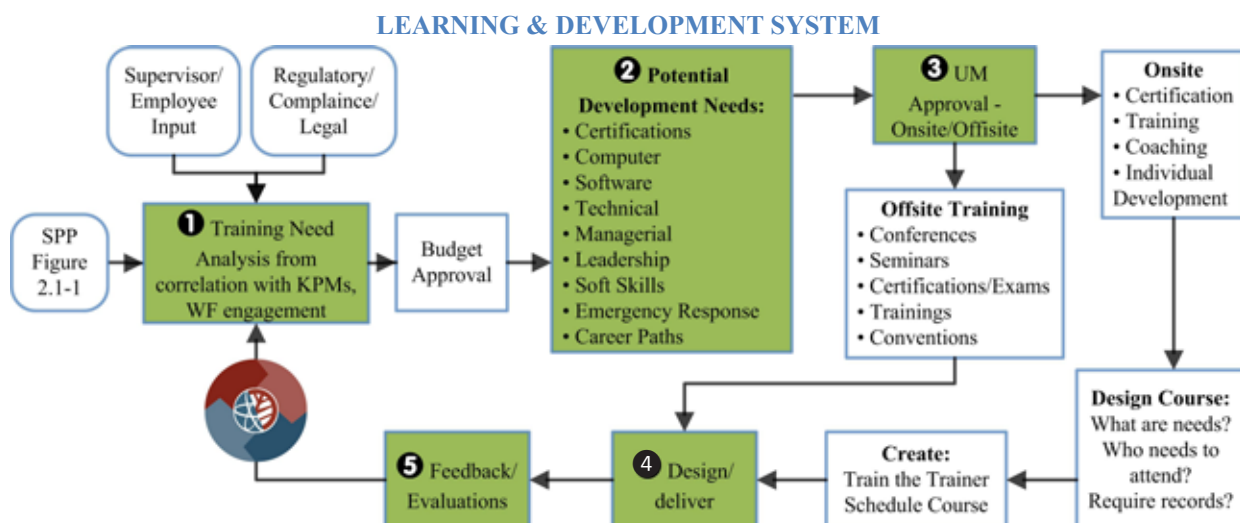
Figure 5.2-3 *WF Learning and Development System ensures personal development and organization needs are met.*

taking, crew members will reduce water flow to an area rather than shut the water off while repairing a line if they feel it is safe to do so. Power crews may also work hot on a line to prevent power outages. They are only able to do this based on the excellent training they receive and their commitment to the customer.

5.2c3 Learning and Development Effectiveness DPU evaluates the effectiveness and efficiency of learning and development processes through review of organizational measures, customer surveys and in many dashboards and reports as outlined in **4.1b**. Evidence of effective safety learning is shown by correlating declining severity or occurrence of injuries and reflected in job injury reports evaluated by the Quarterly Safety Committee (QSC) and SMT. New training options are sought as better training is needed. As an example, DPU needed better wastewater training which was resolved by utilizing a national provider of training instead of the state program. For training requested by an employee, a post training assessment is done to determine if the training objectives were met and if others would benefit from training. GWS and power dispatchers are trained and tested and results are monitored by supervisors to ensure employees are proficient in skills. NASSCO manhole training is one requirement that DPU felt would be better handled in house. A GWS supervisor was certified as a trainer and even facilitates training for the union.

The performance management system correlates outcomes with business results as demonstrated in the example of meter readers in **5.1a4** where meter readers who would become redundant are being retrained to work in the GWS division and assume positions as soon as they become available. This practice retains people experienced in DPU's culture and procedures and saves time and expense. An improvement example is described in **5.2a2** where certifying the superintendent as a trainer and inspector enhanced training and contributed to key business results by the 66% saving on certification of each employee.

Certifications are an essential part of learning and development in the public utilities industry. Per federal pipeline safety regulations, welds performed on steel natural gas pipelines must be performed by a person certified in American Petroleum Institute (API) Method 1104, with an inspector certified in the same procedure to verify compliance. Prior to 2014, when DPU required steel gas pipeline welding services, we had to hire an API 1104 certified weld inspector. There were none available in LAC, requiring us to schedule out of town inspectors, pay their travel expenses and wait on their schedules. To provide more flexibility, save cost and improve organizational performance, DPU sent our GWS Superintendent to the National Welding Certification School to become a certified API method 1104 welding inspector. DPU now can schedule work around only the welder's availability, with significant savings in cost and speed of repairs.

In April of 2018, LAC implemented LITMOS, a cloud-based learning management system. LITMOS allows managers to author, distribute and track web-based training courses, as

well as schedule and track instructor-led courses. Because the system is new, we have not become totally familiar with its functionality. However, we have an action plan established for FY2020 to further explore all the features and determine how we can expand its use, especially to track training requirements and report on deficiencies.

5.2c4 Career Development DPU's PPA process promotes career development and progress with supervisors and employees discussing and planning for growth opportunities and determining training and additional experience needs. DPU provides financial support for training, certification and continuing education costs. The apprenticeship program provides career progression for field crews. Our GWS division is unique as a utility provider because it maintains and operates infrastructure for three utilities (gas, water, sewer) unlike most other providers. GWS staff members have to be proficient and certified in all three utilities. Finding staff qualified in all three utilities has proven to be nearly impossible. Staff are hired with expertise in one utility and then paired with a level 4 for on-the-job training in the other two. To move from one level to the next, they receive regulation and certification training, take the certification test and must prove to their trainer that they have the skills over a 6-month period. Apprentices go from level 1 to 2 and then pipe fitter and finally senior pipe fitter. Employees for WWTP and WP are promoted similarly. Power dispatchers receive formal training for federal certifications and annual refresher training.

In 2015, the critical skills matrix was created to develop future leaders. For key management and leadership positions, critical duties are defined and employees with similar duties are assessed as to their readiness to carry out such duties. The matrix is used to direct training of staff to assume mission critical tasks and to show employees what training they need to be competitive for that position. SLs participate in developing future leaders by mentoring and communicating career paths. SLs work with LAC to successfully promote from within as evidenced by the last two UMs who were internal promotions. Staff in all divisions are promoted from within to supervisory roles.

LAC offers a program for its leaders and potential leaders. The Los Alamos County Leadership Academy's objectives are for participants to develop: a network with other departments, supervisory and leadership knowledge and skills and presentation skills to become more effective communicators. Topics covered are: supervisory skills, leadership models, LAC Code of Conduct, teamwork, communications, HR topics, conflict management, stress management, facilitation skills, transformation leadership, time management, organizational skills and change management.

6: Operations
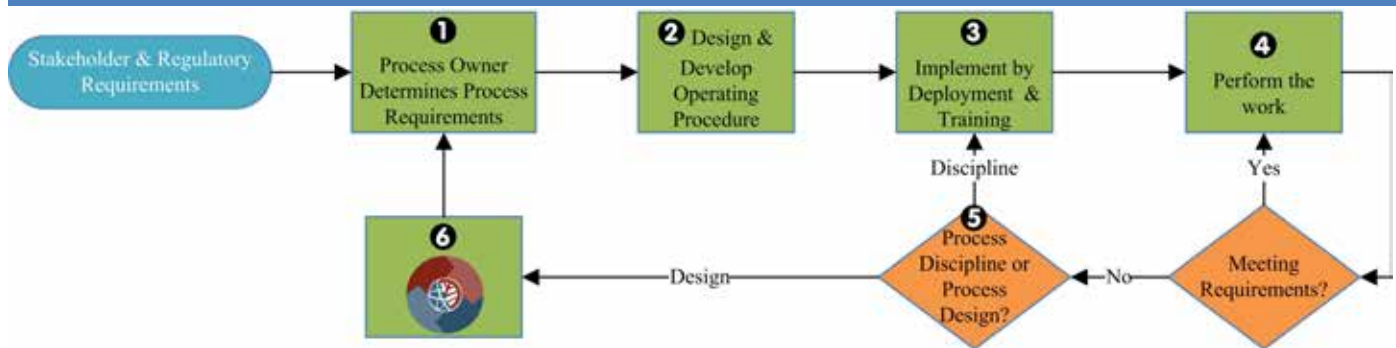
Figure 6.1-1 *We design our processes to meet and exceed our stakeholder requirements.*

Everything we do is a process. We use the Enterprise Systems model (**Figure P.1-0**) to ensure that all aspects of the business ecosystem are included in work process management. All our key work processes (KWPs) deliver value to our customers, and therefore the focus of most of our innovations (**Figure 7.1-25a**) is on KWPs.

Year	Cycle of Learning
2005/ 2007	Utility Infrastructure Condition Assessments living document
2013	Smart Meter & Dynamic Pricing Pilot Project
2014/ 2019	5-year Management Audit using the QNM Zia application
2014/ 2018	KWP benchmarks expanded
2016	Formally documented our Critical Business Systems as part of the Critical Task Matrices

Figure 6.1-0 *Operations cycles of improvement have impact.*

6.1 Work Processes
6.1a Product and Process Design
6.1a1 Determination of Product and Process Requirements
We determine requirements for key products and work processes from customers' needs and expectations. In ❶ of the Key Work Process (KWP) Design process (**Figure 6.1-1**), process owners identify stakeholder (SH) requirements. Key work systems, processes and their requirements are shown in **Figure 6.1-2**. Key work product and process requirements are collected through several listening and learning methods (**Figure 3.1-2**) including industry benchmark reports from American Water Works Association (AWWA), American Public Power Association (APPA), American Public Gas Association (APGA), American Gas Association (AGA), formal and informal surveys, and Board of Public Utilities (BPU) Meetings. Stakeholder (SH) (including customers) requirements are gathered early to ensure that processes deliver the desired outcome. The process owner reviews the requirements to improve the key work process.

6.1a2 Key Work Processes Our primary work processes are shown in **Figure 6.1-2** with the key requirements and measures of performance.

6.1a3 Design Concepts KWPs are designed using the process (**Figure 6.1-1**), as shown in ❷. The design includes ensuring that the process meets requirements that are identified in ❶. Teams with subject matter experts (SMEs) are assembled early in process design to ensure that organizational knowledge is leveraged. Process owners consider opportunities to incorporate new technology and create customer value to deliver product excellence. Process owners have the necessary authority to evaluate risk and build agility into their processes.

KWPs are deployed in ❸ through Standard Operating Procedures (SOPs) located on servers, in emails, included in training and communication in meetings as appropriate to ensure that the approach is understood by the process users.

6.1b Process Management and Improvement
6.1b1 Process Implementation To ensure that day-to-day work processes meet KWP requirements, process owners track and analyze key performance measures (KPMs) using the method identified in **Figure 4.1-1**. Each key process owner collects and documents key process requirements and designs the process SOPs to meet those requirements. In ❹ the workforce (WF) performs the work and the process owners analyze performance using the KPMs. Many operational processes are measured and analyzed in real-time. Dashboards gather and analyze performance measures on a monthly, quarterly and yearly basis. These measures cover all key SOPs. If a measure is found to be trending in an undesirable direction, the process owner analyzes the situation in ❺ and makes necessary adjustments to reverse the negative trend by determining if it is due to process discipline or the design of the SOP. If it's discipline (the workforce isn't following the process) then they are re-trained in ❸. When the analysis indicates an opportunity for improvement is necessary, a redesign is completed using PDSA in ❻.

KPMs, including in-process measures included in **Figure 6.1-2**, are used to control and improve processes. Day-to-day operations are carried out in accordance with operating procedures developed for specific tasks to ensure they meet key process requirements. For instance, work to be performed on an active electric system utilizes a switching procedure. This is a step-by-step list of the work to take place which is reviewed and approved by all staff involved in the work.

The end of process performance measures relates best to product or service quality.

Key Work System	Key Work Process	Key Work Process Reqmts.	Key Performance Measures (Cat 7 Figure)	In Process Measure	End of Process Measure
Electric Production (EP)	Maintain Infrastructure	1, 3, 4, 5	Equivalent Availability Factor DOE (7.1-1)	√	
			Total Power supply Expense per MWh sold (7.1-15)		√
Electric Distribution (ED)	Maintain Infrastructure	1, 2, 3, 4	O&M expense per all account (7.1-16)		√
	Operate Infrastructure	All	System Average Interruption Duration Index (SAIDI) (7.1-2)	√	√
			System Average Interruption Frequency Index (SAIFI) (7.1-5)	√	
			Customer Average Interruption Duration Index (CAIDI) (7.1-4)	√	
Natural Gas Distribution (GD)	Maintain Infrastructure	1, 2, 3, 5	PHMSA Reportable Main Pipeline Leaks/100 miles (7.1-6)	√	
			O&M expenses per all account (7.1-17)		√
	Operate Infrastructure	All	Therms/Capita/Heating Degree Day (7.4-11)		√
Water Production (WP)	Maintain Infrastructure	1, 2, 3, 4	Water Main Breaks/100 miles (7.1-8)	√	
			O&M Expenses / Million Gallons Produced (7.1-18)		√
	Operate Infrastructure	1, 3, 4, 5	Gallons per Capita Daily (GPCD) (7.4-13)		√
			Total Potable Water Produced (M Gallons) (7.1-7)		√
	Maintain Water Quality	2, 4	Drinking Water Compliance (% days in compliance) (7.4-5)	√	
Non-Potable Water (NP)	Construct Infrastructure	1, 6	System Renewal & Replacement (% of PWV) (AOS)		√
	Maintain Infrastructure	1, 2, 3, 4	O&M Expenses / Million Gallons Produced (7.1-19)		√
			Water Main Breaks / 100 miles of Main Pipeline (7.1-10)	√	
	Operate Infrastructure	1, 3, 4, 5	Gallons / Capita/ Day (GPCD) (7.4-12)		√
			Total Non-Potable water produced & distributed (Million Gallons) (7.1-9)		√
Water Distribution (WD)	Maintain Infrastructure	1, 2, 3, 4	O&M Expenses / 100 miles of Main Pipeline (7.1-21)		√
			Water Main Breaks per 100 miles of Main Pipeline (7.1-11)	√	
	Operate Infrastructure	All	Water Service Affordability (Ave. Residential Monthly bill vs Median Household Income) (7.1-12)		√
Wastewater Collection (WC)	Maintain Infrastructure	1, 2, 3, 4	O&M Expenses / 100 miles of Main Pipeline (7.1-24)		√
			Sewer Overflow Events / 100 miles of Main Pipeline (7.1-22)		√
	Operate Infrastructure	1, 2, 3	Sewer Service Affordability (Ave. Residential Monthly Bill vs Median Household Income) (7.1-13)	√	
Water Treatment (WT)	Maintain Infrastructure	1,2,3,4	O&M Expenses /Million Gallons Treated (AOS)		√
	Operate Infrastructure	1,2,3,4, 5	Gallons of Sewage Conveyed & Treated (Million Gallons) (7.1-23)		√
	Maintain Water Quality	2, 4	WWTP Compliance (% Event compliance vs. All permit events) (7.4-6)	√	
ALL	Safety & Emergency Response	All	Percent of Emergency Exercises Completed (7.1-26)		√
			OSHA Incident Rate (7.1-27)	√	√

Key Work Process Legend: 1: Reliability, 2: Quality, 3: Affordability/Value 4: Regulatory Compliance 5: Sustainability

Figure 6.1-2 *Key Work Processes meet their requirements and provide direct alignment to performance measures.*

6.1b2 Support Processes Our key support processes are determined based upon the support needed to sustain the overall operations of DPU and are included in **Figure 6.1-3**. These are essential to supporting KWPs and services in our day to day operations and are determined by how they provide value to our customers, enhance financial return or leverage organizational success.

6.1b3 Product and Process Improvement DPU's process for improving work and support processes to improve our products and process performance starts when SH, including the WF, identify a need to improve a work process. We utilize PDSA as our primary approach to improve overall process effectiveness (**Figure P.2-3**).

Reviews of performance measures can also indicate an opportunity for improvement. Improvement ideas are brought to management or the process owner's attention for consideration. If the change is simple, the owner of the process

is authorized to make changes. If the changes affect multiple

Key Support Process	Key Support Process Reqmts.	Performance Measures (Cat 7 Figure)
Finance (F&A)	1, 3, 4	Number of Billing Adjustments Past due receivables > 90 days (7.5-8)
Customer Care Center (CCC)	2, 4, 5	Abandon calls (7.1-25) Customer satisfaction (7.2-6 & -7) Average wait time (7.2-1)
Public Relations (PR)	4, 5	Bill inserts (7.2-4) Social media engagement (7.2-5) Natural Gas Public Awareness Program (AOS)
Human Resources (HR)	2, 4	Training Hours (7.3-1) Tools & Equipment (7.3-2) Turnover rate (7.3-4) Employee Engagement 7.3-9)

Key Support Process Requirements: 1: Reliability, 2: Quality, 3: Affordability/ Value, 4: Excellent customer service, 5: Access

Figure 6.1-3 *Our Key Support processes ensures that we meet key stakeholder requirements.*

stakeholders, a meeting of the stakeholders will be scheduled to consider and possibly implement the suggestions if doing so aligns with one or more core competencies. If funding is needed, approval must be secured from BPU and Council. There is an agenda process for staff to bring recommendations forward for approval.

Initiating and completing field crew service requests is an example of how improvements to work processes are made. This field work includes trench inspections, meter installs, service connects or disconnects, and initiating billing and discontinuing service. These core processes overlap many groups in DPU's operations. To keep rates competitive, it is critical these processes are effective and efficient. A team with representatives from all areas met and reviewed what was being done and what should be changed. The entire process was documented with a description of responsibilities and how the work is conducted within the Enterprise Resource Planning (ERP), MUNIS. Inefficiencies were identified by the employee focus group which recommended changes to improve the process, including defining responsibilities for customer care center (CCC) representatives entering the request into the ERP work order system and engineering for inspections and operations doing the work. This team resolved issues and the improved process continues to evolve for improved work flow and efficiency.

DPU has developed and deployed a process library with SOPs kept on a network drive so they can be accessed by the entire WF to reduce variability. Each operational area of DPU performs periodic reviews of their key work processes. This review process is performed by process owners and users systematically going through process steps asking "why do we do it this way and is there a better way?" A change procedure

is utilized to ensure improvements are made as needed with management oversight. This process review is overseen by an Operating Procedure Review Committee (OPRC) that meets on a quarterly basis, with a representative from each operational area. The purpose of the committee is to ensure that all operating procedures are reviewed at regular intervals by SHs to look for process improvements. DPU also has a process for deploying proposed changes to our Construction Standards or operations procedures when there are regulatory changes or changes in industry standards which will require policy or procedure changes. The policy or procedure change is routed through the appropriate Asset Management Team (AMT) for input before being submitted to management for final approval.

DPU employs PDSA to improve our processes and root cause analysis to solve our operational problems. See **Figure P.2-3**. Root cause analysis is performed when an issue arises. The process for root cause analysis is:
1. Describe the problem,
2. Determine why it happened,
3. Determine what can be done to prevent from happening again or to minimize and
4. Assign resulting actions with responsible parties and due dates.

6.1c Supply-Network Management Our approach to selecting qualified suppliers to meet our operational needs is included in **Figure 6.1-4**. DPU's purchases are guided by its purchasing regulations which follow the New Mexico Procurement Code. New Mexico emphasizes transparency and equal opportunity to bid. Bidding processes are either Invitation for Bidders (IFB), Request for Qualifications (RFQ) or Requests for Proposals (RFP). We procure items

Select Supplier	Promote Alignment & Collaboration	Ensure Agility	Communicate Performance Expectations, Measure & Evaluate Performance
Water, DPU Water Production	Div. of DPU under Deputy Utilities Mgr. control	Divisions of DPU working together	Daily operations and weekly feedback meetings
Electric Power, DPU Power Supply 75% owned Resources	Division of DPU		Performance expectations are communicated through daily operations and weekly meetings
Negotiated long term gas supply with the Natural Gas suppliers	NM Municipal Energy Acquisition Auth. (NMMEAA), partnership of 4 municipal utilities for mutual benefit	Deal was based on 80% of our historical usage to ensure that we haven't over purchased	DPU communicates annually to County Council customer savings due to NMMEAA gas pre-pay.
Wholesale gas, water & electric equipment suppliers through procurement process	Standard Specification aligned with industry standards	Working with local suppliers on DPU challenges & needs while keeping apprised of new products offered by supplier	DPU communicates with suppliers regularly during the solicitation of goods and through product demonstrations by supplier.
Professional Consultants selected through RFQ & RFP process	Long term established relationships	Pre-approved on-call contracts where by work can begin immediately via task orders	Clear Evaluation Criteria, Construction Standards New work is not guaranteed if work is unsatisfactory.
Electric Power, 25% market purchases using Market Surveys	Expanded market reach	Daily correspondence with Marketers who have ability to adapt to changing market conditions	Day Ahead Schedules & daily market surveys. New purchases are not guaranteed if deliveries are not met. 100% Firm Power delivered, Reliability, competitiveness with Index pricing
Electric Coordination Agreement, LAC and DOE	Common goals for affordable & reliable power supply, sharing power dispatch services.	Sharing of block power purchases and sales among LAC, LANL & Sandia, Kirtland	Bi-monthly Operating Committee meetings covering resource updates, generation resource availability and compliance with regulatory bodies.
Member of Utah Associated Municipal Power Systems (UAMPS)	Generation, transmission, with Govt. & Public Affairs impacting our industry	Lower risk through partnership, sharing knowledge with changing markets, regulations	Monthly project committee feedback meetings

Figure 6.1-4 *Our Supply-Network provides an effective process to manage our suppliers.*

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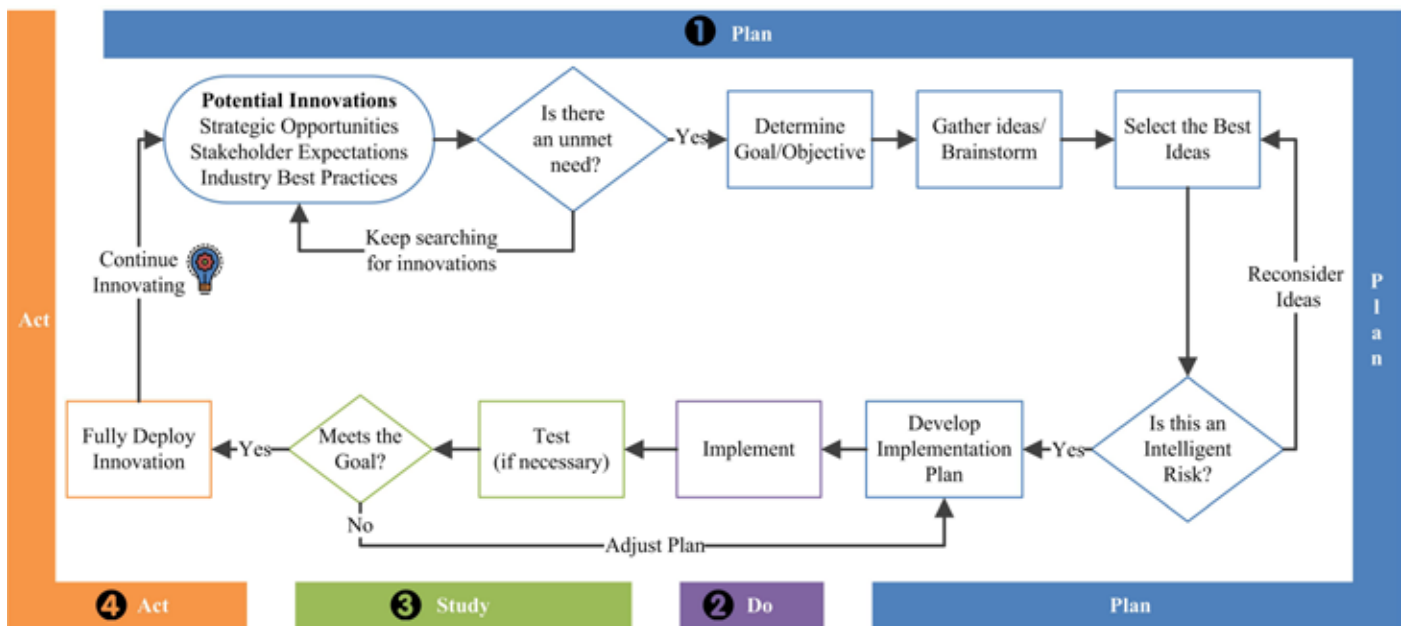
Figure 6.1-5 *Our Innovation Management System provides meaningful change to our stakeholders.*

and services that have clearly defined specifications governing scope, schedule and quality using IFB's to get the lowest available price. In many cases, however, vendor experience, knowledge and resiliency are important factors in securing the best supplies and services to keep DPU competitive. In such cases, we issue a RFP and negotiate with the best qualified vendors to secure the best value for DPU. If unique technology or standardization dictate a sole source of supply, we write a sole source justification to our procurement office stating the reasons for the sole source selection and why there are no other vendors capable of supplying the goods or services.

6.1d Innovation Management We use the Innovation Management System (**Figure 6.1-5**) to guide our pursuit of innovation. The approach follows the PDSA steps (**Figure P.2-3**). We begin gathering potential innovations in the plan phase ❶ by determining strategic opportunities determined from the Strategic Planning Process (SPP, **Figure 2.1-1**), SH requirements (**Figure P.1-6**) and industry best practices. A decision is made if the potential innovations are addressing an unmet need. If so, we establish objectives and goals to be achieved by the innovation and establish performance measures that determine if the innovation is effective. We brainstorm for ideas from our SMEs and compare these solutions, selecting and refining them to quickly and cost-effectively meet the objective(s). In assessing the intelligent risk, the following are key questions we use in determining intelligent risk:

    1. Is the innovation cost-effective?
    2. Could the innovation result in unintended or unwanted consequences?
    3. Does the innovation comply with current and anticipated regulatory requirements?
    4. Does the innovation produce technically sound, defensible and repeatable results?

We develop an innovation implementation plan with initial budgets and resources and clear accountability. We implement the plan in the Do phase ❷. We test ❸ the innovation by reviewing the performance measure and soliciting feedback from our customers, SHs and internal staff to gauge the effectiveness of the implementation, as appropriate. We fully deploy the innovation ❹. Over time, as it becomes clearer that the innovation demonstrates increasing merit, we may dedicate additional funding and resources as necessary to support the plan. If the innovation is not effective in meeting the performance goal and the requirements, we return to the develop implementation step and re-plan as necessary. We may discontinue the innovation if a better idea surfaces or it just doesn't work in making meaningful change at DPU. For example, our customers wanted an application to engage with us and our services. As we progressed, we determined that the systems could not communicate effectively, so we are seeking other potential solutions.

We assembled a citizen committee (the Future Energy Resources or FER committee) to recommend future energy resource solutions. This group consisted of members of LANL, the public schools, commercial and residential customers. They provided innovative suggestions for DPU to assess. Since we are community-owned versus an investor-owned utility, we share our innovation with sister community-owned utility organizations that may be seeking similar solutions to common problems. The 1600 smart electric meter pilot project on North and Barranca Mesas is an example of innovation. By installing smart meters we were able to test virtual dynamic pricing to determine which pricing signals better influence customers' behavior to shift their electric load to different times of the day when electricity is less expensive for DPU. Using this information, we will be able to develop appropriate time of use rates after DPU has installed Advance Metering Infrastructure (AMI) for all its customers. AMI includes electric smart meters and communication modules to transmit gas and water consumption data in 15-minute increments. The AMI project will be implemented in 2019 and completed by 2021.

Year	Cycles of Learning & Improvement
2009	AMTs review process performance
2011	Safety Culture Vision established
2015	Operating Procedure Review Committee
2018	SP focus on benchmarks
Annually	Safety & emergency drill improvements

Figure 6.2-0 *Key work and support processes are more effective due to improvements.*

6.2 Operational Effectiveness

6.2a Process Efficiency and Effectiveness As discussed in **6.1a3** design concepts, during the design of a (SOP) DPU considers the following factors of cycle time, productivity, efficiency and effectiveness as appropriate. Once the SOP is being used, overall operational performance is closely monitored through in-process measures and outcome measures in **Figure 6.1-2**. Many performance measures are benchmarked against industry measures and all performance levels are trended against past performance. To minimize productivity losses the Asset Management Teams (AMT) meet quarterly to review performance and discuss any areas of concern.

To prevent defects, service errors and rework and to minimize the costs of inspections, DPU's overall performance of operations are managed by several systems which include monthly dashboard reviews, quarterly financial reviews, operating procedure reviews, Asset Management Program, standardized methods, Project Administration Procedures (PAPs). For example:

1. **Dashboard reviews:** Monthly as each operational area allows us to be agile and address problems proactively.
2. **Quarterly financial reviews:** Ensure that we are operating in accordance with our established budgets and discuss any need for additional financial resources to meet our key requirements and expectations in the delivery of our services.
3. **Operating Procedure Reviews:** DPU's process for systematically reviewing key SOPs allows us to incorporate new innovative ideas resulting in efficiency gains.
4. **Asset Management Program:** For the eight utilities systems, AMTs include planning for adequate maintenance to preserve and protect the utilities infrastructure, planning for asset replacement or refurbishment to mitigate impacts of failure and ensuring utility rates support these replacement or refurbishment plans. AMT Governance review process ensures that all the AMTs are performing their due diligence analysis for maintaining their systems to meet the needs of our customers at the lowest cost.
5. **Standardized Methods:** Ensuring consistent standards of construction begins with the Utilities Construction Standards - a manual with drawings and specifications. These standards are included in all bid packages for Capital Improvement Programs (CIPs).
6. **PAPs:** 18 SOPs that guide projects from beginning (Implementation Requirements) to end (Project Closeout). These SOPs include alignment to the Mission Statement,

Design Concepts, Project Performance Measures, Baseline Change Control and Project Specific Training. This approach ensures we eliminate any unnecessary waste on projects and keep the projects on cost and schedule.

As an example, wastewater collections AMT recommended a program of regular sewer video inspections along with root control and cleaning of the collection system to reduce costs associated with sewer back-ups and infrastructure replacements.

6.2b Security and Cyber security DPU's information systems are controlled by Los Alamos County (LAC) to maintain awareness of emerging security and cyber security threats. LAC ensures security and cyber security of sensitive or privileged data and information by deploying a defense-in-depth approach, which is the concept of protecting a network with a series layered security mechanisms:

1. LAC makes use of multiple Demilitarized Zone (DMZ) perimeter networks used to segment the internal network and services from untrusted access.
2. A next-generation firewall allows legitimate traffic while blocking bad traffic through a series of rules. The firewall also uses port and network translation to segment and secure necessary incoming traffic for appropriate data/service ingestion.
3. Intrusion Prevention Systems (IPS) are employed that block known malicious signatures in files or external attacks. The firewall IPS is updated by subscription every 24 hours to ensure relevance against new and modified threats. The IPS constantly monitors incoming traffic for malicious signatures and will alert staff when unacceptable thresholds are surpassed.
4. Web filtering and filter definition services block web sites known to host malicious traffic, protecting computers from infection.
5. Email security appliance scans all corporate email for viruses or links to sites hosting malware.
6. Enterprise antivirus (AV) is installed on every endpoint set to scan all files for malware.

Because there are so many threats with such a wide variety of attack methods available, there is no single method for successfully protecting a network. Utilizing the strategy of defense-in-depth reduces risk of having a successful, and likely very costly, attack on the network. We maintain awareness of emerging security threats using a variety of resources such as the SANS institute, NIST cyber security standards and employ the services of expert vendors to ensure LAC systems have adequate protection from attacks.

LAC has also developed a user security policy to educate employees of security needs, issues and their responsibilities for system and data security. Other policy has been developed for specific areas of Information (IT) and security including email, mobile devices and use of social media. Employees are encouraged to read security policies annually.

We manage electronic and physical data and information to

ensure confidentiality and appropriate access by requiring all employees, vendors and partners with access to DPU data to sign a confidentiality and data usage agreement. All parties are provided access only to data they require to get their work done. All systems employ the model of zero access to start and rights are granted as needed by job function. Limited confidential information is kept on customers; social security numbers or bank account information are not stored on LAC servers.

We use a one-size-fits-all approach to identify and prioritize information systems to secure them from cyber-attacks. All LAC systems follow the same standards and guidelines for cyber security which makes deployment, maintenance and troubleshooting more effective and efficient. Computer systems are protected from cyber security attacks by ensuring all laptops are fully encrypted, mobile devices require installation of Microsoft Azure mobile device security application and outside access to the LAC network requires use of the Virtual Private Network (VPN). Two-factor authentication is employed when required to remotely access the network. Strong passwords are enabled throughout the network and must be changed every 90 days and customer accounts are locked after three invalid login attempts. Accounts with 90 days of inactivity are automatically locked. The LAC Server rooms access is limited and the rooms are kept locked. Video surveillance and door sensors are used for monitoring access and notifying IT staff of entry to Server rooms.

Multiple approaches are utilized to successfully detect, respond to and recover from cyber security breaches. Real-time notifications of systems and the deployment of auto updating subscription-based threats definitions are received from LAC security vendors and other security sources to keep cyber security appliances and software up-to-date. Cyber security audits are performed by a third-party vendor and remediation efforts are prioritized and implemented to reduce exposure to cyber-attacks. Security updates are performed on a daily/weekly basis to the network, server and end user computers. Server software updates are applied monthly to ensure that security driven patches are implemented on a timely basis.

6.2c Safety and Emergency Preparedness
6.2c1 Safety Our safety culture vision (**Figure 6.2-1**) is centered around the slogan "Our Way of Life, Join Us." Our preamble to safety states: "DPU seeks to create a safety culture where employees practice safety every hour on the job, while no one is watching, because employees want to, not because employees have to." Our goal is to promote how safety is managed in the workplace by creating a work environment which reflects attitudes, beliefs, perceptions and values that employees share when it comes to safety. Our approach and deployment safety methods are included in **Figure 6.2-1**. In addition, we hold a Quarterly Safety Committee meeting. In this meeting, we review and share best practices, address safety prevention, inspections, root causes, analysis of failures and how we recovered as necessary.

We Believe:	Approach/Deployment
Safety is First	• WF recognizes that safety is first no matter the circumstance • WF has obligation to report & follow-up unsafe conditions • Be aware of "what could go wrong" & maintain a sense of vulnerability • WF empowered to call "time-out," reassess or re-evaluate • WF responsible for safety of co-workers & public
Lead by Example	• SLs committed to WF safety • SLs committed to developing & fostering mutual trust • SLs follow all safety rules • Leaders monitor/review near-misses, SIRs; take actions to avoid repeat incident
Establish High Work Performance	• System for performance measurement & rewards • Ensure crews have training, tools & PPE to work safely • Empower WF to identify training needs to meet/exceed job safety requirements
Brief/Tailgate Every Job	• Field supervisors shall complete job briefing forms daily or for every project • WF affirm job briefing forms • WF empowered to extend job brief until full understanding • WF empowered to call out safety rule violations • While at job site, WF wears appropriate PPE including hard hats
WF Safety Suggestions	• Managers seek WF input & suggestions on procedures & safety • WF empowered to make work & safety suggestions • Evaluate WF suggestions & respond • System for monitoring safety performance measures • Encourage innovative solutions to safety problems
SLs=Senior Leaders, WF=Workforce, PPE=Personal Protective Equipment, SIR=Severe Injury Report	

Figure 6.2-1 *The Safety Culture Vision, beliefs provide clear guidelines for all employees.*

6.2c2 Business Continuity We ensure that DPU is prepared for disasters and emergencies using our PDSA approach (**Figure P.2-3**). Safety and Emergency Response is a key work process; therefore, we use our key work process (KWP) design process (**Figure 6.1-1**) to identify performance requirements and develop processes that deliver the desired level of service for all utilities and all SH. Considerations include prevention, continuity of operations and recovery. Once vulnerabilities and threats are identified, plans are developed to mitigate risks, including ways to ensure the availability of a well-prepared workforce, reliable suppliers and partners. As described in **6.2b**, IT systems are designed to be secure and continuously available to meet business and customer needs. Numerous preparedness plans have been developed, including the Emergency Operations Plan (EOP) coordinated with Los Alamos County, Continuity of Operations Plans (COOP) an internal plan to make sure we have an easy to use SOP for all employees in case of an emergency (2-page document), Emergency Action Plans (EAP) for the Dam and hydroelectric generating plants (regulatory requirement) and electric, gas and water curtailment plans. To ensure robust deployment of plans, staff conducts multiple exercises on preparedness plans each year staff also participates in emergency tabletop/fullscale exercises developed and practiced by the county and appropriate SH. Lessons learned from exercises and real emergencies are documented and incorporated in preparedness plans and the PDSA cycle continues.

7: Results

When an issue surfaces, the first question asked by the SMT is, "What does the data tell us and how do our results compare to valid comparisons?" DPU selects, collects and integrates data to determine progress in business, customer and process results and measure stakeholder DPU satisfaction (**Figure 4.1-1**). Results using comparative data provide current progress toward meeting strategic objectives and action plans against benchmarks where available. The use of "gut feel" data and information is not in our culture. Results drive improvements at DPU. Performance expectations are high and the workforce strives to sustain that in every transaction, every time.

Preferred trends are up unless indicated by a down arrow.

7.1 Product and Process Results Item 7.1 is a complex criterion. To answer the breadth and depth and to ensure all aspects are addressed, a table of contents has been provided:

7.1 Results Area to Address	Source of Requirement	Result Figure(s)
a Customer-Focused Product and Service	Figure P.1-6	7.1-1–7.1-13
b1 Work Process Effectiveness, Efficiency & Innovation	Figure 6.1-1	7.1-14–7.1-25
b2 Safety and Emergency Preparedness	Figure 6.2-1	7.1-26 & 7.1-27
c Supply-Network Management	Area 6.1c	7.1-28

7.1a Customer-Focused Product and Service Results Performance measures in **7.1a** provide results that are integrated to Strategic Objective 3.1 "Customer Service processes and systems are efficient and used friendly," in **Figure 2.1-4**.

Customer Segment: Electric (EP/ED) To measure the effectiveness of our ability to maintain our infrastructure to produce electricity, DPU tracks the Hydroelectric Equivalent Availability Factor (EAF). The measure provides available hours on an annual basis. As indicated in **Figure 7.1-1**, Abiquiu meets and exceeds the benchmark in all years and El Vado has made significant improvement and is approaching the benchmark.
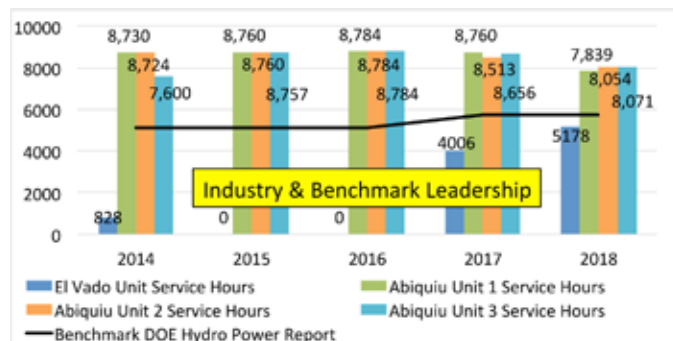
Figure 7.1-1 *Hydroelectric Equivalent Availability Factor (EAF) by unit (EP)*

Overall performance for the delivery of electricity is measured by System Average Interruption Duration Index (SAIDI) (see acronym glossary) in **Figure 7.1-2**. Our goal is to be below 60 minutes (:60). We exceeded the APPA benchmark 4 out of the last 6 years. Some of our electricity comes from LANL and jurisdiction and is out of our control. In 2017, they impacted our electric distribution. We lost a supply station and both feeders to our switching station that caused SAIDI to increase.
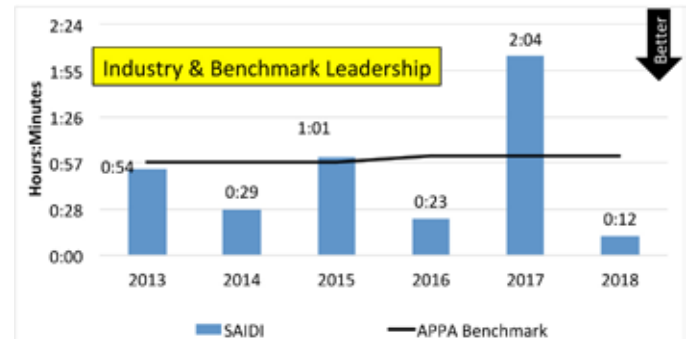
Figure 7.1-2 *Electric System Average Interruption Duration Index (SAIDI) (ED)*

We use Average System Availability Index (ASAI) (see acronym glossary), **Figure 7.1-3**, to measure system reliability and we are performing well above the APPA benchmark.
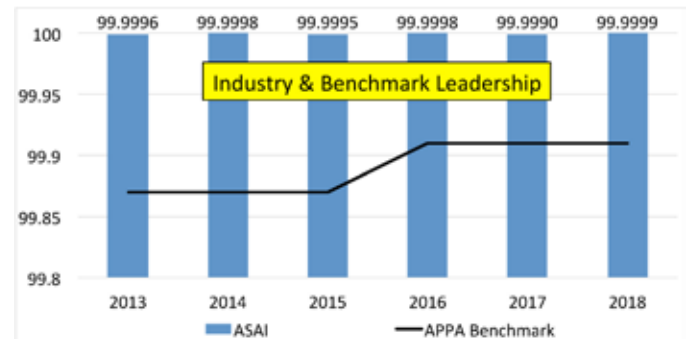
Figure 7.1-3 *Average System Availability Index (ASAI) (ED)*

We have seen an increase in Customer Average Interruption Duration Index (CAIDI) (see acronym glossary) over the last 2 years, **Figure 7.1-4**.
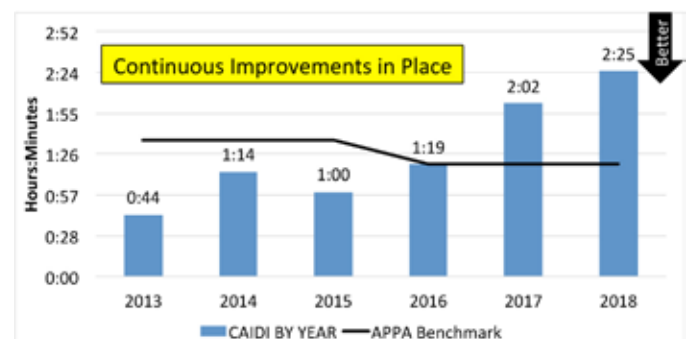
Figure 7.1-4 *Customer Average Interruption Duration Index (CAIDI) (ED)*

We also measure the reliability using the System Average Interruption Frequency (SAIFI) (see acronym glossary), **Figure 7.1-5**. Results indicate continuous improvement and benchmark performance versus the APPA benchmark.
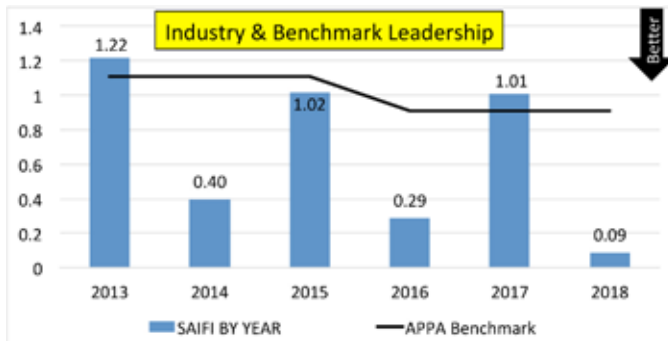
Figure 7.1-5 *System Average Interruption Frequency Index (SAIFI) (ED)*

Customer Segment: Gas The number of gas leaks per 100 miles of main pipeline is a useful measure of the overall quality and reliability of the gas distribution system, **Figure 7.1-6**. Results indicate benchmark performance versus the APGA national standard.
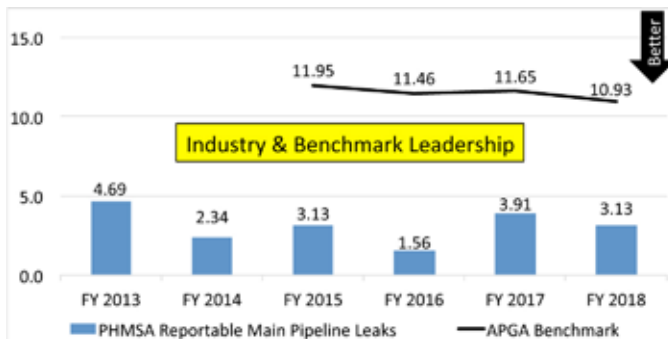
Figure 7.1-6 *Reportable Main Pipeline Leaks per 100 Miles of Pipeline (GD)*

Customer Segment: Water (Potable and Non-Potable) We track potable water produced in **Figure 7.1-7**. This is a simple cumulative total to show if actual water produced matches projected sales. Projecting water demand can be very complex, taking into consideration variables such as past usage, population changes, weather and conservation. Being able to accurately calculate water demand is very important when planning future projects and budgets. An accurate forecast can be a good indication that different tracking systems, such as metering, are efficient and functioning well.
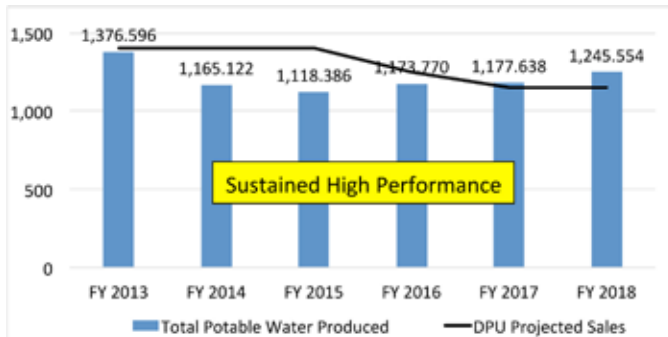
Figure 7.1-7 *Total Potable Water Produced (Million Gallons) (WP)*

The number of water main breaks per 100 miles of main pipeline is an effective measure of overall quality and reliability of the potable water transmission system, **Figure 7.1-8**. Please note that DPU data for this measure is not available prior to FY2017. We are performing better than the AWWA benchmark.
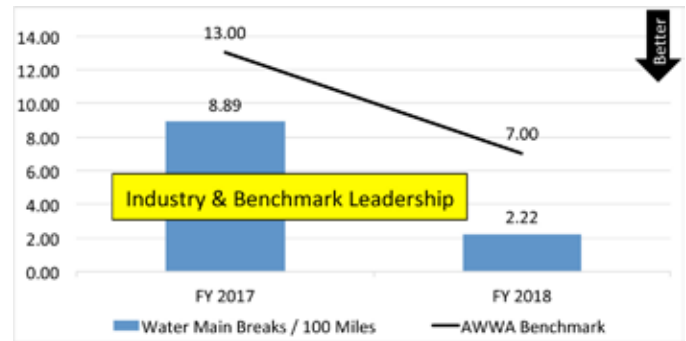
Figure 7.1-8 *Water Main Breaks per 100 Miles of Main Pipeline (Potable Transmission) (WP)*

Figure 7.1-9 Non-Potable Water Produced measures if actual non-potable water produced matches projected sales, as is the case with potable water. Projecting water demand is very complex, taking into consideration variables such as past usage, population changes, weather and conservation. An accurate forecast is a good indication that different tracking systems such as metering, are efficient and functioning well.
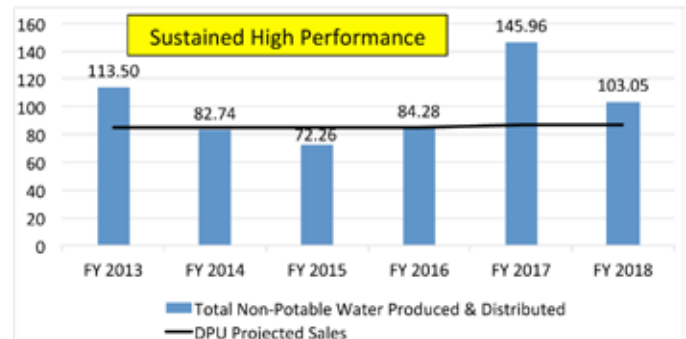
Figure 7.1-9 *Total Non-Potable Water Produced and Distributed (Million Gallons) (NP)*

The number of non-potable water main breaks per 100 miles of main pipeline is an effective measure of the overall quality and reliability of the non-potable water transmission system, **Figure 7.1-10**. DPU inherited miles of old non-standard pipelines and has been implementing pipeline replacement projects as funding has allowed. Please note that DPU data for this measure is not available prior to FY2017.
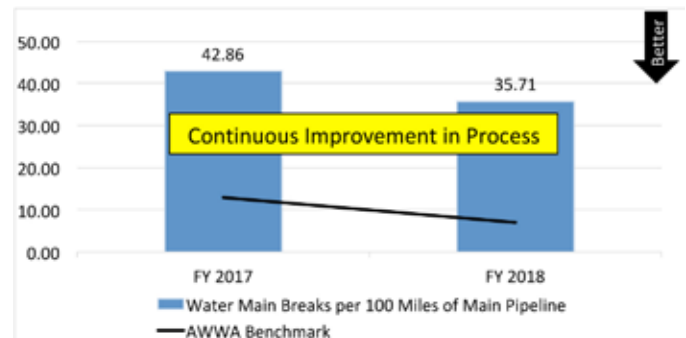
Figure 7.1-10 *Water Main Breaks per 100 Miles (NP)*

The number of water main breaks per 100 miles of main pipeline is a useful measure of the overall quality and reliability of the water distribution system, **Figure 7.1-11**.

The American Water Works Association (AWWA) recognizes that providing reliable and high-quality water services
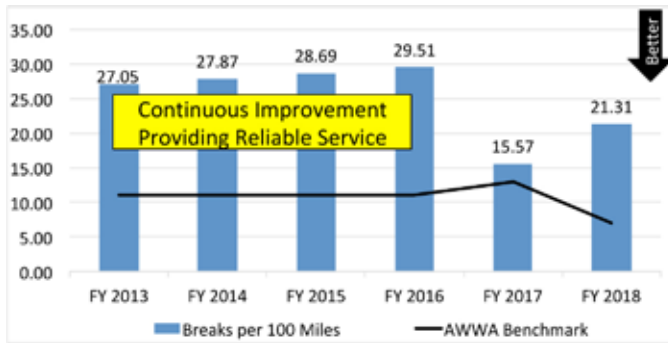
Figure 7.1-11 *Water Main Breaks per 100 Miles (WD)*

at fair and reasonable rates and charges to all customers is fundamental to a utility's mission. To be financially sustainable, DPU optimizes expenditures through operating efficiencies, implements water conservation and resource management best practices and prudently manages capital, operating and financing costs. Pricing of water services should accurately reflect the true costs of providing high-quality services to consumers to maintain infrastructure and plan for upcoming repairs, rehabilitation and replacement of that infrastructure, while also taking into consideration the median household income of the community. Pricing decisions involve considerations of equity as well as efficiency. **Figure 7.1-12** provides benchmark level performance.
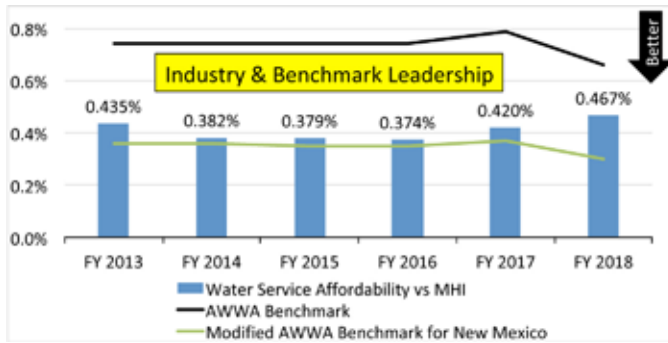
Figure 7.1-12 *Water Service Affordability (WD)*

Customer Segment: Wastewater Well-maintained infrastructure is affordable and reliable Wastewater reliability, equates to Sewer Service Affordability. **Figure 7.1-13** is cost as a percentage of median household income. When we can keep the costs to our customers lower, the more satisfied they are with our wastewater service.
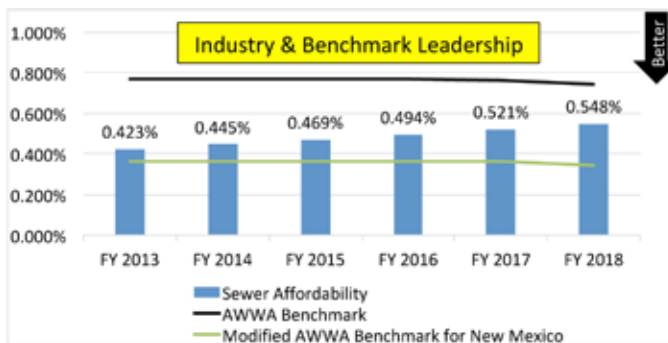
Figure 7.1-13 *Sewer Service Affordability (WC)*

7.1b Work Process Effectiveness Results
7.1b1 Process Effectiveness and Efficiency Performance measures in **7.1b1** provide results that are integrated to

Strategic Objectives 1.1-1.8, in **Figure 2.1-4**.

Customer Segment: All We measure the effectiveness and efficiency of our meter installations, maintenance, programming and reading. Meters that are properly installed, functioning correctly and programmed and read accurately require fewer re-reads. Efforts to address meter issues have reduced the number of meter re-reads by about 20% since fiscal year 2016.
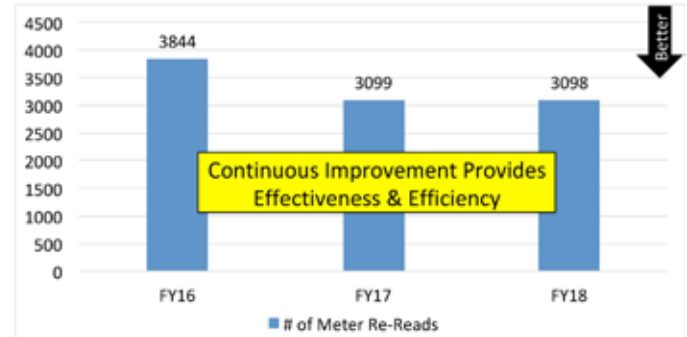
Figure 7.1-14 *Number of Meter Re-reads*

Customer Segment: Electric We measure effectiveness of electric service by the total power supply expense per MWh sold to customers in **Figure 7.1-15**. The ratio measures all power supply costs, including generation and purchased power associated with the sale of each megawatt hour. DPU has improved by 25% since CY 2013 and is outperforming the APPA top quartile for the last two years.
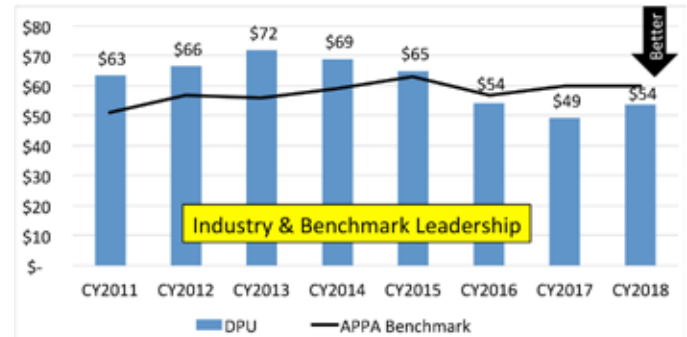
Figure 7.1-15 *Total Power Supply Expense per MWh Sold (EP)*

We also track the amount of money spent on operations and maintenance per customer in **Figure 7.1-16** to assess whether or not the electric distribution system is being maintained efficiently given the scale of the operation.
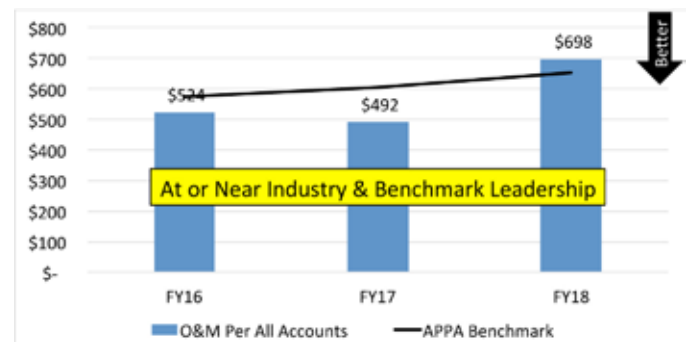
Figure 7.1-16 *O&M Expenditures per All Accounts (ED)*

Customer Segment: Gas We track the same measure for GD efficiency and effectiveness in **Figure 7.1-17**. We have improved our efficiency by 14% since FY 2013.
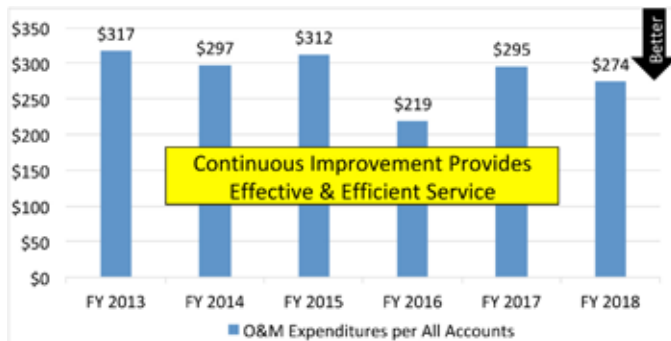
Figure 7.1-17 *O&M Expenditures per All Accounts (GD)*

Customer Segment: Water We track O&M expenditures as a measure of water system performance efficiency and effectiveness in **Figure 7.1-18**. This tracks the amount of money spent on O&M per million gallons produced in the potable water system and assesses whether the WP system is being maintained efficiently given the scale of the operation. We have improved potable water efficiency by 62% since FY 2013 and are outperforming the AWWA benchmark.
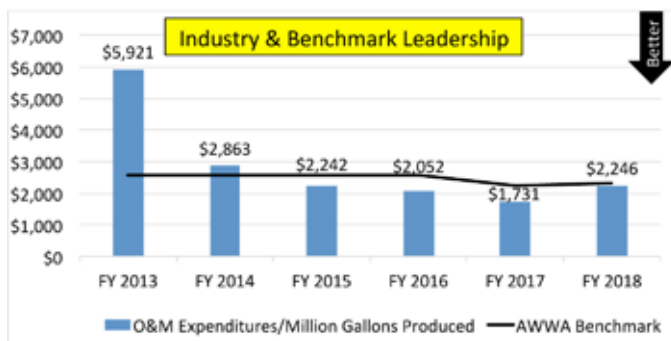
Figure 7.1-18 *O&M Expenditures per Million Gallons Potable Water Produced (WP)*

We also track O&M Expenditures per million gallons produced for non-potable water, **Figure 7.1-19**. We have improved our non-potable water efficiency by 49%.
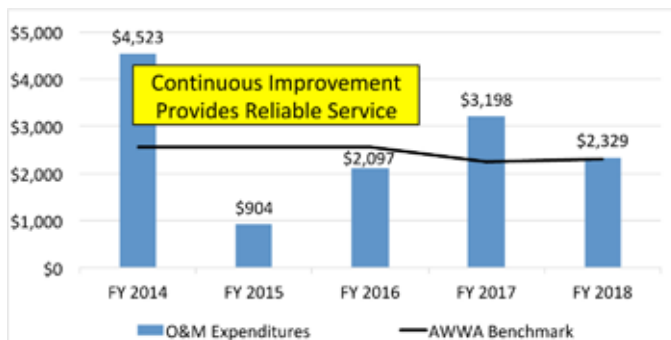
Figure 7.1-19 *O&M Expenditures per Million Gallons of Non-Potable Water Produced and Distributed (NP)*

We are required to test drinking water lead and copper levels in individual residences where the highest lead levels are likely to be found per Environmental Protection Agency (EPA) 1991 Lead and Copper Rule. We conduct sampling on a triennial basis, but we may sample more frequently, as

appropriate, to ensure high quality water. Results in **Figure 7.1-20** indicate 100% effectiveness in meeting EPA standards.
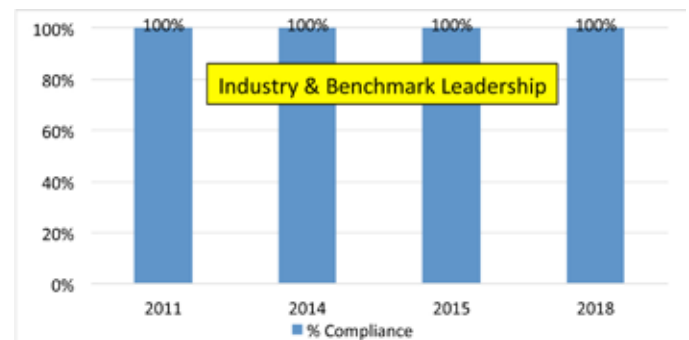
Figure 7.1-20 *Lead and Copper Water Sampling (WD*

O&M Expenditures per 100 miles of main pipeline for WD in **Figure 7.1-21** indicates 24% improvement in efficiently maintaining our system. Given the scale of the operation we are making progress in meeting the AWWA benchmark. Water distribution is more expensive than most AWWA contributors due to our size and terrain.
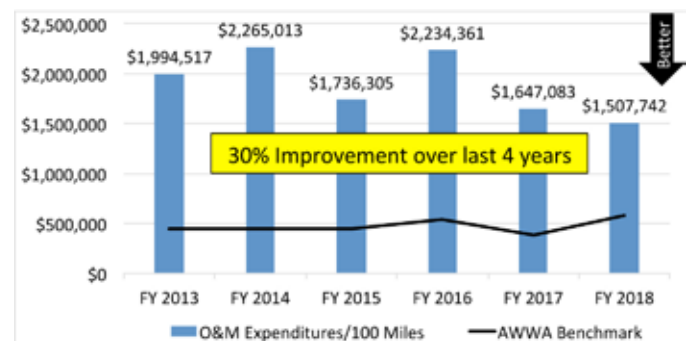
Figure 7.1-21 *O&M Expenditures per 100 Miles of Main Pipeline (WD)*

Customer Segment: Wastewater We track sewer overflows per 100 miles of pipeline to assess effectiveness and efficiency of WC maintenance processes in **Figure 7.1-22**. We have improved our performance by 50% since FY 2013.
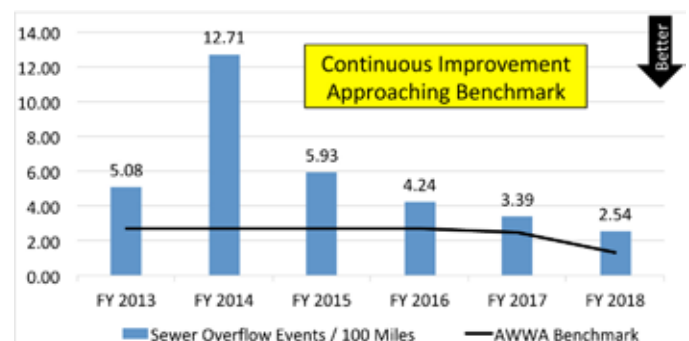
Figure 7.1-22 *Sewer Overflow Events per 100 Miles of Main Pipeline (WC)*

We assess historical sewage conveyed and treated as a method of predicting and adequately budgeting for the treatment needs of the community. **Figure 7.1-23** measures the amount of sewage that we have conveyed and treated.
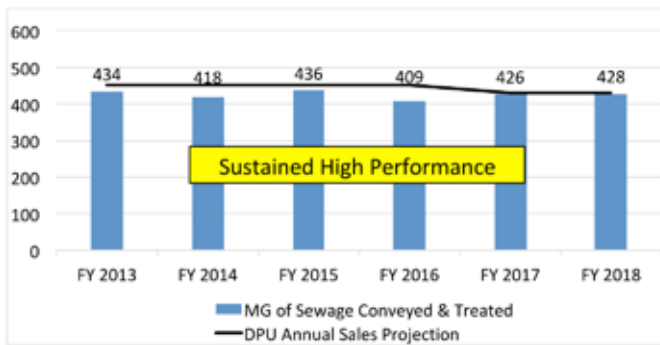
Figure 7.1-23 *Gallons of Sewage Conveyed and Treated (WT)*

We track O&M Expenditures per 100 miles of Main Pipeline for WC on **Figure 7.1-24**. Results indicate increased expenditures due to an increased emphasis in repair & replacement in the 27 sewer lift stations. Costs per 100 miles of sewer main pipeline is going up for three reasons: 1) We are having more sewer blockages and overflow events on our canyon drop - canyon ledge pipelines, and these take a lot of time and money to resolve because of the extra caution that must be taken to safely access these areas and correct the problem. These seem to occur during the winter months when ice and snow make it extra difficult and dangerous. To address this issue in the long-term, we have programmed full replacement of every canyon drop sewer pipeline in our 10-year & 20-year CIP (AOS). 2) Our sewer lift stations are old (20 - 40 years) and many of their major high dollar components (such as pumps and control panels) have aged out and are in need of replacement. We have elected to do significant repair and replacement (R&R) on each sewer lift station through the O&M budget. We plan to have all of our older sewer lift stations fully refurbished in the time frame between FY17 and FY21 (progress AOS). 3) We inherited a sewer system from DOE that included a significant number of locations where multiple homes were served off of a single 4" clay pipeline. These small lines, usually located in backyards behind fences and vegetation, have deteriorated to the point where they are often becoming clogged with roots. Over the next three to four years these lines will be replaced with new larger lines not subject to root intrusion.
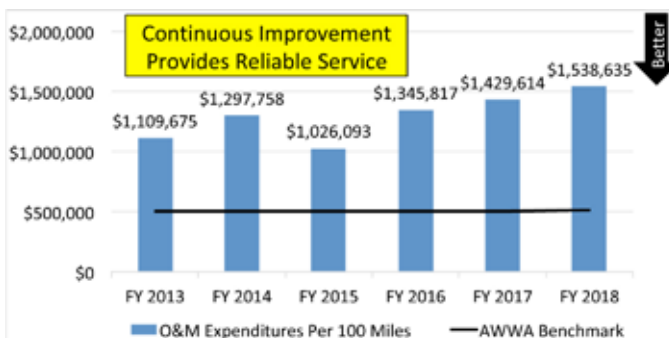
Figure 7.1-24 *O&M Expenditures per 100 Miles of Main Pipeline (WC)*

A key performance measure of excellent customer service is abandoned call rate for CCC. In FY18, we received an increased number of abandoned calls due to staffing turnover, technical issues and two major, widespread power outages. The first outage affected 3,000 customers during work hours.

Customers called the CCC to report the outage and quickly overwhelmed our staff. The second outage, Nov. 2017, affected 6,000 customers after hours. The voice mail message instructs these customers to hang up (abandon the call) and dial police dispatch to report the outage. FY18 results shows all abandoned calls, including those by instruction after hours. In the future, DPU will only track abandoned calls during hours of operation to better understand the true impact on customer service.
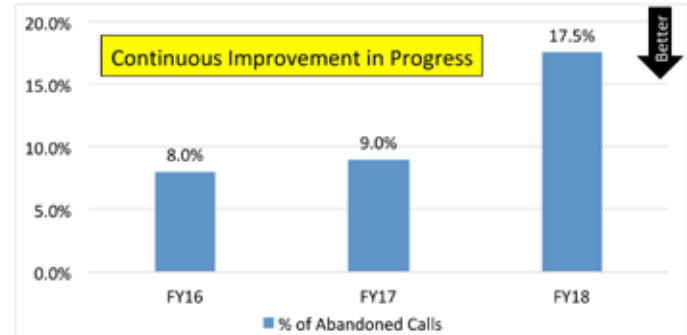
Figure 7.1-25 *Abandoned Call Rate for All Customer Segments*

Finally, **Figure 7.1-25a** (on next page) provides nearly 80 years of innovation initiatives researched, studied and implemented by DPU. Innovation process effectiveness results are segmented by process types as shown in **Figure 6.1-2** and **Figure 6.1-3**.

7.1b2 Safety and Emergency Preparedness Performance measures in **7.1b2** provide results that are integrated to Strategic Objective 4.2 "Employees promote a culture of safe and ethical behavior."

To ensure we are prepared for emergencies, we conduct exercises. As indicated in **Figure 7.1-26**, we have met the schedule every time for fiscal years 2014-2018.
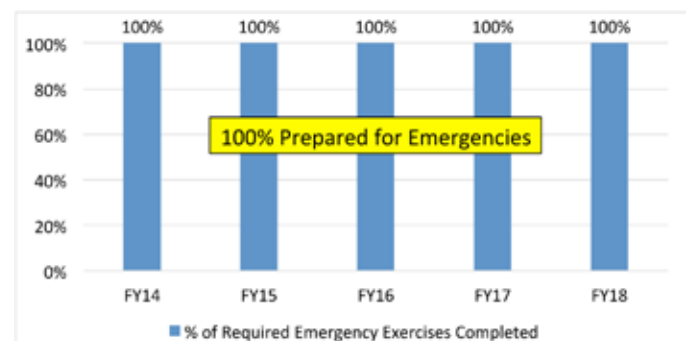
Figure 7.1-26 *Percent of Required Emergency Exercises Completed*

We track our OSHA incident rate in **Figure 7.1-27** compared against the Bureau of Labor benchmark for public utilities. Our trend had improved from 8 incidents to under 4 per year.

| Process Figures 6.1-2 & -3	Innovation	Year
NP	First in US to use effluent water to irrigate a golf course	1940s
EP	Signed ECA with DOE-DOE resulting in DPU becoming an electric producer. Construct 2 renewable energy hydroelectric plants, purchase percentage ownership in power plant, etc. Vertical integration & increase renewable energy to 20 – 28%.	1986
ED, GD	Purchase ED & GD in White Rock from Public Service Company of NM; provide savings & improve service & response time	1989
WP	Took over ownership/operation of WP for LAC from DOE; provide savings	1998
NP	Capture non-potable water from LA Reservoir and tie to the community's irrigation system to reduce amount of drinking water used for watering turf areas.	2005
EP	Create LA Green program for customers to purchase renewable energy credits to couple with electric consumption, making it green power.	2005
ED, WP, WD	Underground electric lines and improve water capacity, redundancy and fire protection	2005
WC	Use Horizontal Directional Drilling in place of open trenches for installing gravity flow WC pipes, minimizing disruption to our customers; innovative due to topography and geology (volcanic Tuff).	2005
All KWP	Develop in-house condition assessments for each utility as living documents, making staff subject matter experts vs. contracting to 3rd party; cost-savings & knowledge is retained in-house	2005-07
EP, ED	Early adopter of Interconnection-connection with Cogeneration Rule to encourage customers to add rooftop solar; compensation to customer in the form of net metering	2006
EP	Operate merchant desk services for LAC and DOE-LANL which is a cost savings to both parties.	2008
CCC	Operate Customer Care Center (from LAC); cost savings	2008
NP, WD	Initiate project at ski hill; provide enhanced fire protection by capturing snow melt near ski lodge (successfully used in 2011 fire) & allow snow making for winter season (economic development)	2009
EP	Expand merchant desk services to Sandia National Laboratory and Kirtland Air Force base; provide more efficient service and save costs	2009
All KWP	Create Asset Management Teams – a cross section of employees from different DPU divisions	2009
All KWP	Create Internship Program for student engineers; encouraging them to become interested in the utilities field while providing much needed assistance to DPU during construction season	2010
EP, ED	U.S.-Japan demonstration smart grid project demonstrates high penetration of renewable energy on a residential electric grid, using smart grid technology. Partners: DPU, NM, LANL & Japanese government	2010
ED	Assign individual journeymen linemen responsibility for specific electric distribution feeders (Circuit); assisted in improving electric reliability	2010
EP	Add low-flow turbine generator to Abiquiu plant; increase renewable EP capacity 22%. Project received $4.5 million (50% of project costs) from federal American Reinvestment & Recovery Act	2011
EP	Sign ACE MOU to maximize renewable EP at Abiquiu plant; ACE receives renewable energy from DPU & in turn adjusts water releases from dam to increase power generation.	2011
GD	Join NMMEAA for natural gas purchases to take advantage of discounts to pass to customers	2011
EP	First in NM to install PV array on a landfill; adds to renewable energy portfolio	2013
F&A	Smart meter pilot project implements virtual dynamic pricing research with Kyoto University	2013 -15
F&A, WT	Initiate composting operations on landfill: cost savings to DPU and valuable product for customer	2013
EP	BPU adopts SMT carbon neutral goal of 2040	2013
GD	Change gas rate to a pass-through rate, eliminate reserve fund; reduce the cost of gas for customers	2013
EP, ED, PR	Create ad-hoc citizen committee (FER) to engage customers to research and suggest DPU's future energy resources and define "carbon neutral"	2014
EP	Join UAMPS, 46 small public utilities members; mitigates risk, keeps projects affordable, e.g. the Carbon Free Power Project (CFPP), a first-of-a-kind Small Modular Nuclear Reactor (SMR)	2014
DPU	Include White Papers from SMT at strategic planning to address innovation & agility	2015
F&A	Implement project to leverage GIS upgrade and DPU financials related to the new ERP	2015/18
HR	Reorganize workforce for more productivity and development	2015
F&A, CCC	Deployed the Los Alamos smart mobile app for customers to manage utility accounts online	2016
WT	Special financing and ordinance to replace Wastewater Water Treatment Plant	2018
F&A, NP	Implement SCADA metering system (billing and regulatory reporting) for the non-potable water system	2018
Innovation is our Vision		

Figure 7.1-25a *Innovation Inventory*
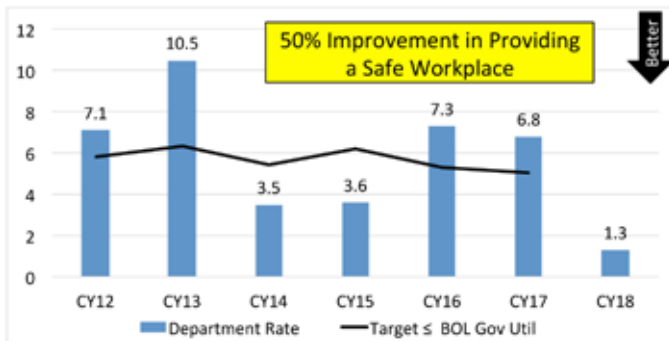
Figure 7.1-27 *OSHA Incident Rate*

7.1c Supply-Network Management Results Performance measures in **7.1c** provide results that are integrated to Strategic goal 1.0 "Provide Safe and Reliable Utility Services."

We track major supplier satisfaction in **Figure 7.1-28**. This measure reflects the results of a supplier survey we performed to determine our ability to meet their requirements and expectations. The specific question is based on whether their operation is improved by our partnership with them.

Figure 7.1-28 *Major Supplier Survey Satisfactions*

7.2 Customer Results All Performance measures in **7.2a** provide results that are integrated to Strategic Goal 3.0 "Customers and Community – Be a customer service oriented organization that is communicative, efficient and transparent," in **Figure 2.1-4**.

7.2a Customer-Focused Results
7.2a1 Customer Satisfaction Figure 7.2-1 provides results for the Average Customer Wait time on the phone in minutes in our Customer Care Center. Results indicate that improvements in the center have decreased customer wait times by over 50% and align with the customer requirement of excellent customer service.

Figure 7.2-1 *Average Customer Phone Wait Time (Minutes)*

Figure 7.2-2 Commercial Customer Satisfaction and **Figure 7.2-3** Residential Customer Satisfaction contain the results of our biennial customer satisfaction survey by customer

Segment	Measure	2011	2013	2015	2017
Electric	Overall Quality	N/A	N/A	3.3	3.6
	Reliability	3	3.3	3.3	3.6
	Value	3	3.1	2.8	3.2
Gas	Overall Perf.	3.5	3.6	3.4	3.6
	Reliability	N/A	N/A	3.4	3.7
	Value	N/A	N/A	2.9	3.2
Water	Overall Perf.	3.5	3.5	3.4	3.6
	Reliability	N/A	N/A	3.4	3.6
	Value	N/A	N/A	2.9	3.1
Wastewater	Overall Perf.	3.5	3.5	3.3	3.6
	Reliability	N/A	N/A	3.4	3.6
	Value	N/A	N/A	2.8	3.2
Overall	Overall Perf.	N/A	N/A	3.4	3.4
	Billing Accuracy	3.3	3.3	3.2	3.2
Field Crews	Courtesy	3.9	3.6	3.6	3.7
	Knowledge	3.5	3.4	3.6	3.4
	Able to Resolve	3.3	3.3	3.6	3.4
CCC	Courtesy	3.6	3.6	3.7	3.4
	Knowledge	3.4	3.2	3.2	3.2
	Able to Resolve	N/A	N/A	3.1	3.1
Goal is 3.5 or Higher					
Approaching Goal – "Good" Rating 3.0-3.4					
Sustained Excellent Commercial Customer Service					

Figure 7.2-2 *Customer Satisfaction (Commercial)*

Segment	Measure	2011	2013	2015	2017
Electric	Overall Quality	N/A	N/A	3.5	3.4
	Reliability	3.1	3.3	3.4	3.4
	Value	3.1	3.1	3	2.9
Gas	Overall Perf.	3.6	3.6	3.6	3.5
	Reliability	N/A	N/A	3.6	3.5
	Value	N/A	N/A	3	3
Water	Overall Perf.	3.5	3.6	3.6	3.4
	Reliability	N/A	N/A	3.6	3.5
	Value	N/A	N/A	3	2.9
Wastewater	Overall Perf.	3.5	3.5	3.5	3.4
	Reliability	N/A	N/A	3.6	3.5
	Value	N/A	N/A	2.9	2.9
Overall	Overall Perf.	3.3	3.4	3.3	3.3
	Billing Accuracy	3.3	3.3	3.3	3.2
Field Crews	Courtesy	3.7	3.6	3.6	3.5
	Knowledge	3.6	3.5	3.6	3.5
	Able to Resolve	3.5	3.3	3.5	3.3
CCC	Courtesy	3.5	3.5	3.5	3.3
	Knowledge	3.2	3.4	3.3	3.1
	Able to Resolve	N/A	N/A	3.2	3.0
Goal is 3.5 or Higher					
Approaching Goal – "Good" Rating 3.0-3.4					
Sustained Excellent Residential Customer Service					

Figure 7.2-3 *Customer Satisfaction (Residential)*

segment. Results indicate consistent levels of customer satisfaction within all segments which supports our core competency of "Building Customer and Partner Relations." Results for the value questions that are below 3.0 are being addressed through improvement efforts to communicate the value of the services we provide in bill inserts and community outreach. The survey uses a 1- 4 point scale.

7.2a2 Customer Engagement Public communications (Press Releases, Bill Inserts, Advertisements, Radio Interviews, Reports and Public Meetings), **Figure 7.2-4**, are an important means of maintaining and improving customer engagement. This improves the value that our customers feel about the services we provide. We have increased numbers of communications by over 25% since CY 2014.
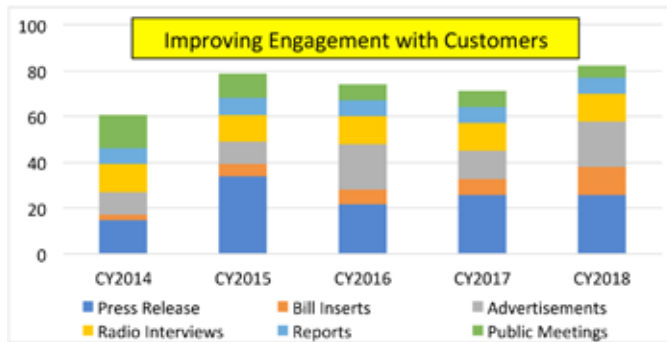
Figure 7.2-4 *Public Communications*

We actively engage our customers through social media. We have doubled our engagement since FY16 well above our target to be equal to or above the previous year.
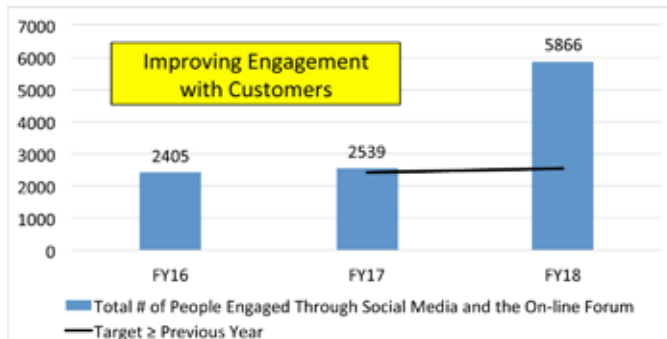
Figure 7.2-5 *Social Media Engagement and Online Forum Posts*

Figure 7.2-6 Net Promoter Score, which we began tracking in FY 2015, provides results for the "likely to recommend" question for our commercial customer segment on the customer survey. Our results indicate excellent improvement with our commercial customer segment.
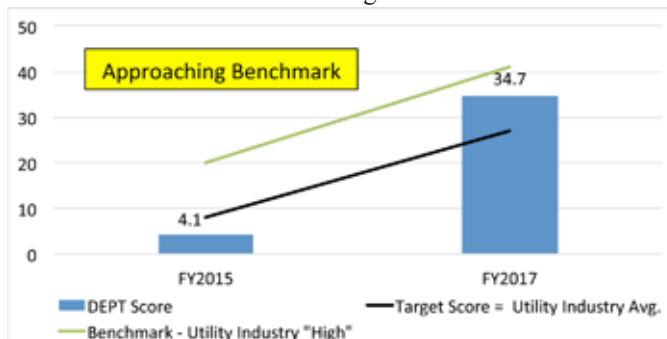
Figure 7.2-6 *Net Promoter Score (Commercial)*

Figure 7.2-7 Residential Net Promoter Score provides results for the "likely to recommend" question for our residential customer segment on the customer survey. Expanding AMI to more residential customers will positively impact NPS results in the near future; further gains in longer-term clean energy sources endorsed by our residents should also improve NPS results.
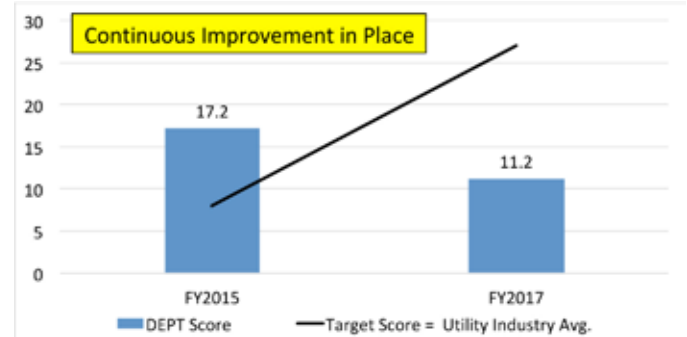
Figure 7.2-7 *Overall Net Promoter Score (Residential)*

Figure 7.2-8 Our overall communication score indicates our ability to communicate with our residential and commercial customers. These results come from the biennial customer survey.

Segment	2011	2013	2015	2017
Commercial	3.1	3.1	3.1	3.3
Residential	3	3.1	3	3.1
Goal: 3.5 or Higher (4 point scale)				
Approaching Goal – "Good" Rating 3.0-3.4				
Continuous Improvement Provides Reliable Service				

Figure 7.2-8 *Overall Communications (Commercial & Residential)*

Finally, we generate revenue for our 'customer' LAC through franchise fees and payments in lieu of taxes.

	FY2014	FY2015	FY2016	FY2017	FY2018
Revenue	$1.4M	$1.4M	$1.6M	$1.5M	$1.5M
Consistent Funding for County Operations					

Figure 7.2-9 *Annual Revenue for LAC (in round numbers)*

7.3 Workforce Results
7.3a Workforce-Focused Results
7.3a1 Workforce Capability and Capacity Performance measures in **7.3a1** provide results that are integrated to Strategic Goals 1.0 "Provide Safe and Reliable Utility Services" and 4.0 "Sustain a capable, satisfied, engaged, ethical and safe work environment," in **Figure 2.1-4**.

To ensure we have the appropriate skills, we measure results for training hours from LITMOS are included in **Figure 7.3-1a**. We are in the early stages of using this system, but it gives us a method to track each division's capability and capacity. We have made significant progress in training our workforce and increasing our capability and capacity. This result supports our core competency of Employee Development (**Figure P.1-2**).

Segment	# of Classes Completed – Tracked in LITMOS	# of Hours Spent on Training – Tracked on Dashboards
	Apr 2018 – Apr 2019	FY2018
Admin/Eng	296	Not Tracked
Electric	374	840
GWS	525	1,536
Water Prod.	238	144
WWTP	90	287
Department Total	1,523	2,807
Continuous Improvement in Training our Workforce		

Figure 7.3-1a *Training Hours & Classes*

We track capability and capacity through competencies and/or certifications required as part of employee job requirements in **Figure 7.3-1b**. Green shading indicates we meet the base requirement and blue shading indicates benchmark performance.

Competency/ Certification or Equiv.	Base Reqd.	# Certified	% Base Requirement
Balancing & Inter. Cert.	2	2	100%
CPA, CFE, CGFM	0	1	N/A
Cross Connect/Backflow Prev. Cert.	7	7	100%
Engineering in Training Cert.	0	1	N/A
Journeyman Elect. Lic.	9	9	100%
Journeyman Gas Fitters Lic.	9	9	100%
License EL-1J	0	1	N/A
Plastic Weld or Pipe Fusion Cert.	15	15	100%
PM Professional Cert.	0	1	N/A
Registered P.E.	4	5	125%
Transmission Op. Cert.	6	6	100%
Wastewater Sys. I Cert.	6	7	117%
Wastewater Sys. II Cert.	9	9	100%
Wastewater Sys. IV Cert.	4	4	100%
Water Sys. I Cert.	9	9	100%
Water Sys. II Cert.	10	11	110%
Water Sys. IV Cert.	6	6	100%
TOTAL	**96**	**103**	**107%**
Exceeding WF Capability & Capacity Requirements			

Figure 7.3-1b *Competency Levels & Compliance with Certification/License Training Requirements*

DPU conducts a comprehensive biennial employee survey to measure changes over time regarding WF climate and employee engagement and satisfaction. In 2016, DPU
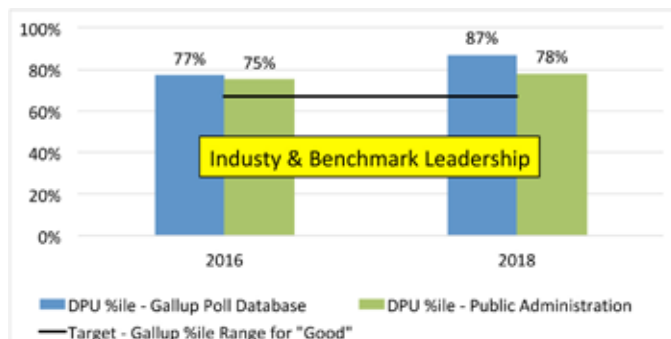
Figure 7.3-2 *Materials and Equipment to Do My Work Right*

began using Gallup Q12 to measure WF engagement, which consists of actionable workplace elements with proven links to performance outcomes. Percentile results are included in **Figure 7.3-2**. We are improving and performing higher than the range for "Good" for Gallup and Public Administration.

We also track Employee Length of Service in **Figure 7.3-3a** to assess WF capability and capacity. This result provides us with a look at the maturity of the WF and our ability to retain WF knowledge. Our objective is to have at least 50% of the WF with at least seven years length of service as this indicates, not only their knowledge but their loyalty to DPU.
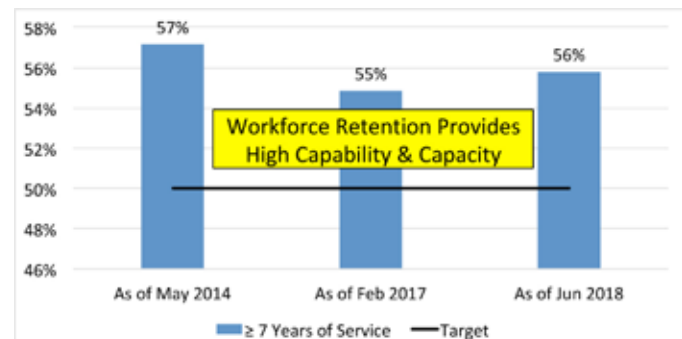
Figure 7.3-3a *Workforce Length of Service*

Segment	# of Positions	%
Admin/Eng		
FY16	28	100%
FY17	24	100%
FY18	24	100%
Electric		
FY16	25	100%
FY17	25	100%
FY18	25	100%
GWS		
FY16	19.75	100%
FY17	25.75	100%
FY18	25.75	100%
Water Prod.		
FY16	10.25	100%
FY17	9.25	100%
FY18	9.25	100%
WWTP		
FY16	9	100%
FY17	9	100%
FY18	9	100%
Department Total		
FY16	92	100%
FY17	93	100%
FY18	93	100%
100% Capable Employees		

Figure 7.3-3b *Percent of Employees Possessing Required Professional Credentials*

We screen new-hires using our rigorous new-hire screening process to ensure that every employee possesses the minimum credentials for their positions. Results in **Figure 7.3-3b** indicate that we have met all minimum requirements for every new member of our workforce.

7.3a2 Workforce Climate Performance measures in **7.3a2** provide results that are integrated to Strategic Goal 4.5, "Sustain a capable, satisfied, engaged, ethical and safe WF focused on customer service" **Figure 2.2-2**.

We track involuntary separations as an indicator of our workforce climate (Integrity and ethics). Involuntary turnover (**Figure 7.3-4**) results when an employee is not a good fit for our organization and culture. If our HR processes are well designed and executed, involuntary separations should be very low. Results are outstanding and in three of the six years presented we had zero involuntary separations. We compare favorably to LAC.
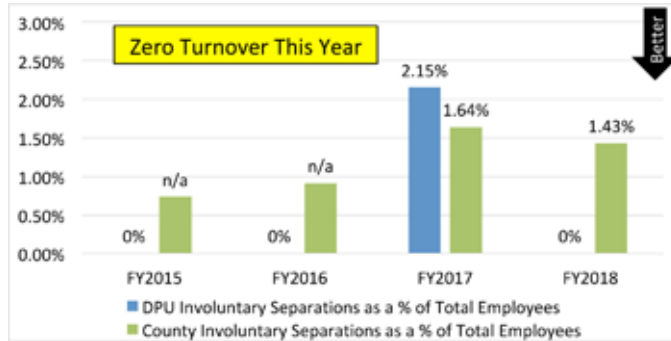
Figure 7.3-4 *Comparative Turnover rate (% of Involuntary Separations)*

We track performance for the workforce requirement of job satisfaction using the Gallup survey. Employees are asked, on a scale of 1-5, "How Satisfied are you with your organization as a place to work?" **Figure 7.3-5** shows results for overall workforce satisfaction. We are approaching the top quartile for Public Administration. Our Utilities Manager had held employee focus group meetings to address overall workforce satisfaction.
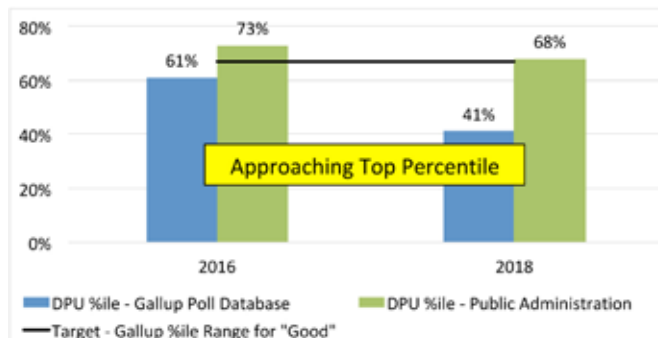
Figure 7.3-5 *Overall Satisfaction*

Employees' response to the question from the Gallup survey they "have the opportunity to do what they do best everyday" (**Figure 7.3-6**), indicates top quartile results. This provides results for the workforce's key requirement of accountability.
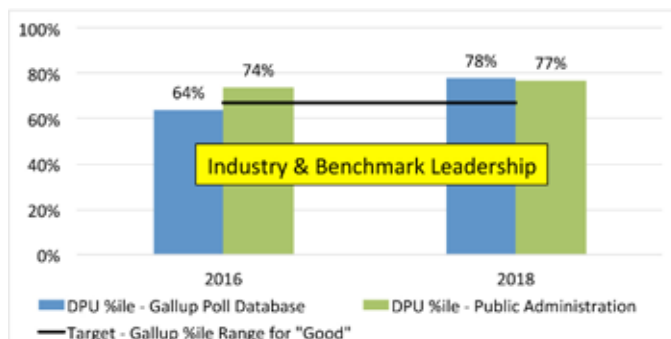
Figure 7.3-6 *"I have the opportunity to do what I do best every day."*

A workforce key requirement is good pay and benefits. The DPU Senior Management Team believes that the generous sick and annual leave benefits offered by Los Alamos County help employees achieve a positive work/life balance and helps retain valuable employees. Unusual trends in department-wide average leave balances could be indicators of possible cultural problems where a work/life balance is not valued or encouraged. Maintaining an adequate leave balance is a great way for employees to protect themselves in the event of unforeseen emergencies or to prepare for retirement. Because employees can use sick leave to extend their retirement date, it is not unusual to see high leave balances. Many of our employees take advantage of this generous benefit. Results in **Figure 7.3-7** indicate that our workforce has effective work/life balance.
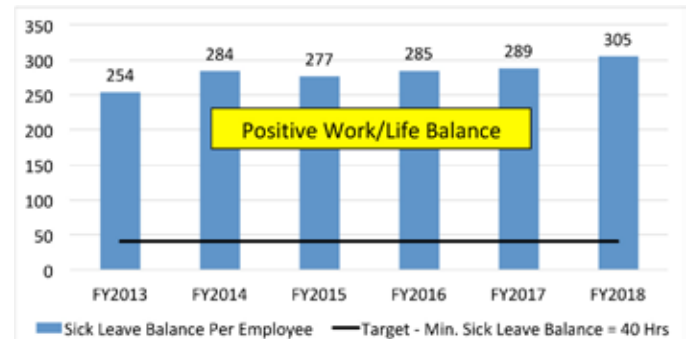
Figure 7.3-7 *Sick Leave Balances*

7.3a3 Workforce Engagement Performance measures in **7.3a3** provide results that are integrated to Strategic Objective 4.3, "Employees are engaged, satisfied and fairly compensated," in **Figure 2.1-4**.

There was no engagement scoring prior to the 2016 survey when we began using the Gallup survey. Employees were asked general engagement questions, but no quantifiable score was ever calculated. Our results for Workforce engagement in **Figure 7.3-8** show we have made progress and are approaching the top quartile.
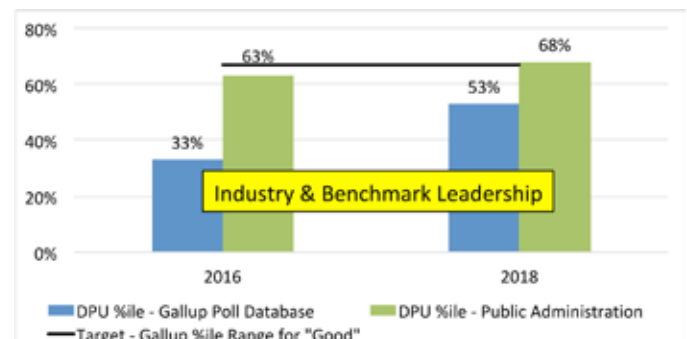
Figure 7.3-8 *Employee Engagement*

Employees want to feel supported as mentioned in **Figure P.1-6**. We measure that key requirement by asking the "my opinion seems to count" question, **Figure 7.3-9**. We are improving and approaching the top quartile.
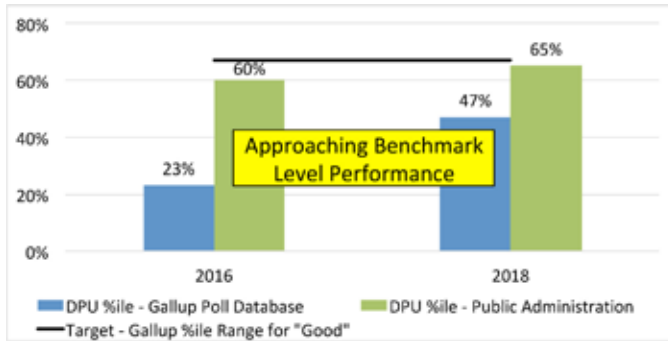
Figure 7.3-9 *"My opinion seems to count."*

7.3a4 Workforce Development Performance measures in **7.3a4** provide results that are integrated to Strategic Objective 4.1, "Leaders invest in employee training and professional development," in **Figure 2.1-4**.

Along with the results in **Figures 7.3-1a** and **7.3-1b**, we measure the effectiveness of our workforce development by the number of leaders and potential leaders (14% over the last four years) who have attended the Los Alamos County Academy (**Figure 7.3-10**). The Academy's objectives for participants are to: develop networks between the departments, develop supervisory and leadership knowledge and skills and develop presentation skills to be more effective communicators.
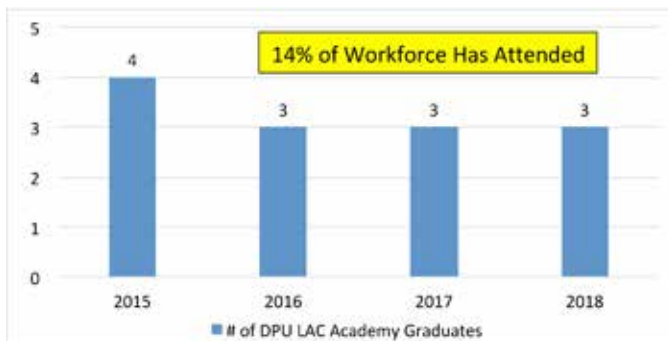
Figure 7.3-10 *Employees Who Have Completed Los Alamos County Academy*

Figure 7.3-11 provides the results that employees feel that we care about their career development and in 2018 we achieved top percentile performance.
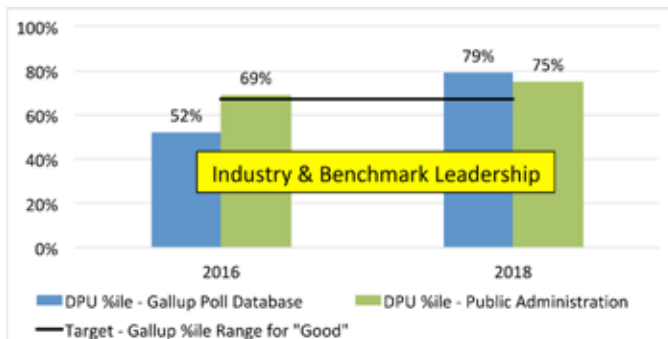
Figure 7.3-11 *"Someone at work encourages my development."*

Another way to measure effectiveness of learning and development is communicating and discussing employees' performance and development progress. Results in **Figure 7.3-12** indicate top percentile performance in 2018.
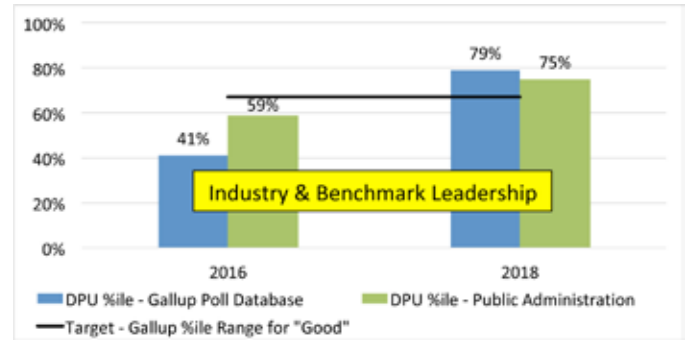
Figure 7.3-12 *"Someone at work has talked to me about my progress."*

7.4 Leadership and Governance Results Performance measures in **7.4** provide results that are integrated to all strategic goals in **Figure 2.1-4**.

7.4a Leadership, Governance and Societal Contribution Results
7.4a1 Leadership Employees indicated that senior leaders communicate and engage the workforce in DPU's vision and values to create action. Results from the employee survey are included in **Figure 7.4-1** "I know what is expected of me at work," and **Figure 7.4-2** "I have received recognition." Results for **Figure 7.4-1** were in the top third percentile of the Gallup poll data and Public Administration data.
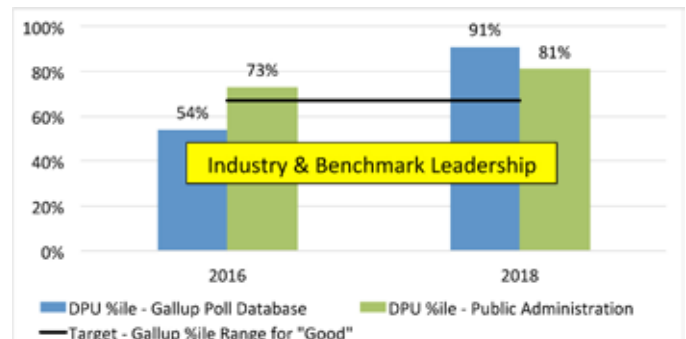
Figure 7.4-1 *"I know what is expected of me at work."*
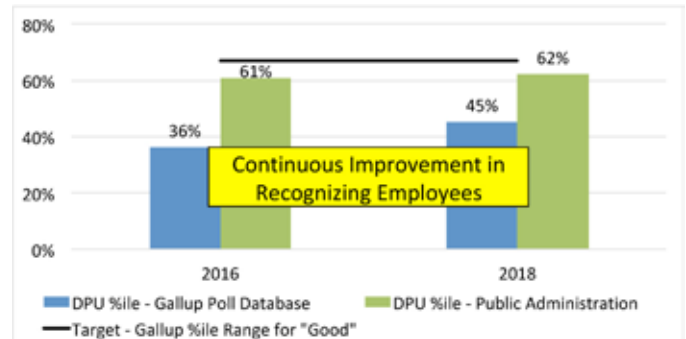
Figure 7.4-2 *"I have received recognition in the last seven days."*

Figure 7.4-3 indicates that MVV makes employees feel their job is important. This indicates the integration of the SMT's Mission to engage the workforce is aligned to their jobs and what they come to work for every day.
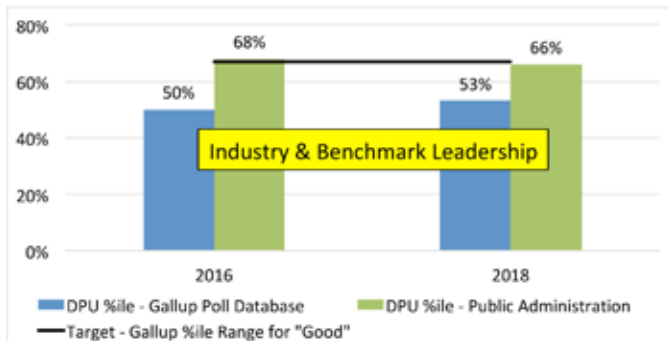
Figure 7.4-3 *"My job is important in meeting DPU's mission and vision."*

Year	Method	# Apply	Board Composition
2012	1 Newspaper Ad	1	5 men
2013	1 Newspaper Ad	2	5 men
2014	Enhanced	8	5 men
2015	Enhanced	4	5 men
2016	Enhanced	3	4 men, 1 woman
2017	Enhanced	5	3 men, 2 women
2018	Enhanced	5	3 men, 2 women
BPU Diversity Improved			

Figure 7.4-4b *Governance: Board Diversity*

7.4a2 Governance Key results for our governance system are shown in **Figure 7.4-4a**. These results demonstrate sustained high performance in key elements of governance such as accountability, independence, transparency, etc.
BPU diversity provides accountability, protection of SHs and balancing value throughout our operations as indicated in **Figure 7.4-4b**. Our enhanced recruiting process has resulted in more applicants and board diversity, with 2016 marking

the first appointment of a women to serve on our board in over a decade. Other diversity results AOS. Selection of board members is done through recruitment, interviewing and appointment by Council. In 2014 DPU enhanced the recruitment process to include a brochure, ads, press releases, social media and flyers posted in libraries and stores, etc. These enhanced approaches have resulted in more applicants and better diversity that reflects our communities.

| Key Aspects	Approaches	FY16	FY17	FY18
Accountability for Strategy & SL Actions	Strategic goals are reviewed annually by BPU	Yes	Yes	Yes
	SLs incorporate feedback received from WF & stakeholders in setting SP goals. Examples of feedback include customer surveys & Council input	Yes	Yes	Yes
	Goals are cascaded to WF through PPAs	Yes	Yes	Yes
	Annual goals are monitored throughout the year	Yes	Yes	Yes
	Annual goals are measured & included in performance reviews. Accomplishments are included in quarterly & Annual reports to BPU	Yes	Yes	Yes
Fiscal Accountability	Annual Budget is approved by the BPU & posted online	Yes	Yes	Yes
	Monthly financial activity & budget performance is reported to the BPU quarterly	Yes	Yes	Yes
	See Figure 7.4-7(Legal & Regulatory Compliance & Risk) for Audits, Internal Controls & Loan Covenants results	Yes	Yes	Yes
	Financial policies adopted by BPU	Yes	Yes	Yes
	LAC Procurement Regulations followed	Yes	Yes	Yes
Independence & Effectiveness & Audits	An annual third-party financial audit is performed by an independent CPA firm.	Yes	Yes	Yes
	The CAFR is submitted to the State & available online	Yes	Yes	Yes
Transparency in Operations	Customers have online access to their accounts	Yes	Yes	Yes
	PR is dedicated to disseminating & sharing information with customers. Tools incl: Website, Intranet, Bill inserts, social media posts & media stories, door hangers	Yes	Yes	Yes
	Monthly BPU meetings are open to the public & meeting minutes are published	Yes	Yes	Yes
	Biennial customer survey results reviewed by SLs collectively to identify opportunities for improvement	Yes	Yes	Yes
	Policies & SOPs are accessible to WF	Yes	Yes	Yes
	Performance metrics are tracked daily & monthly, & quarterly, KPMs used by AMTs & WF	Yes	Yes	Yes
	Key Account meeting with customers	Yes	Yes	Yes
Selection of Governance BPU Members	Members of the BPU are appointed to staggered 5-year term	Yes	Yes	Yes
	BPU & UM must file Conflict of Interest statements annually	Yes	Yes	Yes
Protection of Stakeholders & Rate Payers	BPU Meetings are open to the public & require a quorum to adopt a rate ordinance	Yes	Yes	Yes
	Rate studies are performed	Yes	Yes	Yes
	WF Ethics Training, robust Job Training & Safety Culture	Yes	Yes	Yes
	We listen to our SHs through various listening posts & community outreach (Figure 3.1-2)	Yes	Yes	Yes
Succession Planning for Senior Leaders	UM reviews critical task matrix with direct reports	Yes	Yes	Yes
	Deputy Director positions were created to support continuity of operations	Yes	Yes	Yes
	Policies & SOP's are in place to provide guidance to WF	Yes	Yes	Yes
Full Compliance with All Key Aspects of Governance				

Figure 7.4-4a *Governance System*

7.4a3 Law and Regulation Results for meeting or surpassing legal and regulatory requirements in water treatment are included in **Figure 7.4-5**. Drinking water compliance is measured by the number of days in full regulatory compliance as a percent of all days for the potable water system. DPU has historically performed very well in this area with 100% compliance with regulatory requirements.
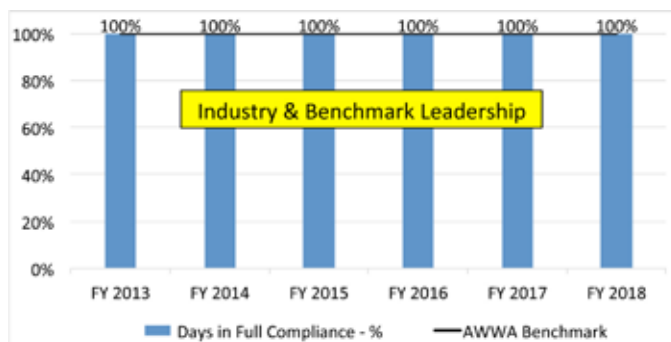
Figure 7.4-5 *Drinking Water Compliance*

Figure 7.4-6 provides WWTP Regulatory Compliance results. This measure is defined as the number of permit parameter test results found in compliance as a percent of all permit parameter tests required. There are between 50 and 55 permit parameter tests required each month at each WWTP. An example of a permit parameter test is the requirement that the daily pH is between 6.6 and 9.0.
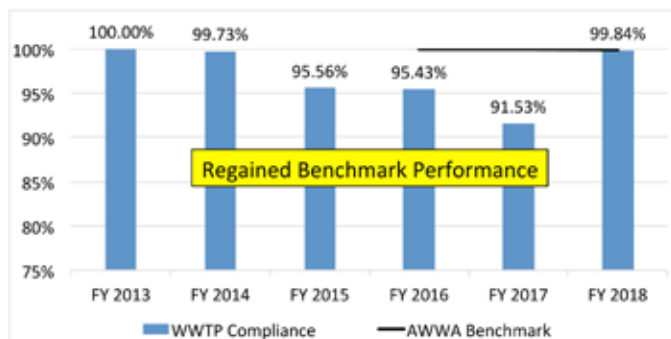
Figure 7.4-6 *WWTP Compliance*

Figure 7.4-7 indicates results from the legal and regulatory table in **Figure 1.2-4**. DPU meets and exceeds all legal and

Area Reg/ Legal	Key Process	Authority	KM	Goal	FY 16	FY 17	FY 18
R: Finance	Audits	NMOSA	F	NV	NV	NV	NV
R: Finance	Internal Controls	DPU	V	NV	NV	NV	NV
R: Finance	Loan Covenants	Bond Trustee	V	NV	NV	NV	NV
L: EP	IRP	PUP	C	NV	NV	NV	NV
L: WP	Dam inspection	NMOSE	F	NV	NV	NV	NV
L: Gas	Leak Survey	NMPRC	T/C	NV	NV	NV	NV
L: WW TP	Discharge Monitoring	NMED	A/V	NV	NV	NV	NV
L: DPU	Safety	NM OSHA	V	NV	NV	NV	NV
A=Accurate, C=Complete, F=Findings, V=Violation, T=on-time; Goal: NV=No Violations; PUP=Prudent Utility Practice							
Sustained High Performance For All Legal Compliance Processes							

Figure 7.4-7 *Legal and Regulatory Compliance and Risk*

regulatory requirements. The column titled KM or Key Measure represents how the legal or regulatory process compliance is determined.

Safe Drinking water is a given to our customer but DPU is required to provide results to the public via the Consumer Confidence Report (Public Notification Compliance). **Figure 7.4-8** indicates that we have met all publication requirements.

Fiscal Year	Report Issued for Calendar Year	# of Violations
FY2014	2013	0
FY2015	2014	0
FY2016	2015	0
FY2017	2016	0
FY2018	2017	0
Sustained Excellence Provides Safe Water		

Figure 7.4-8 *Safe Drinking Water – Consumer Confidence Report Compliance*

7.4a4 Ethics Figure 7.4-9 provides results of WF training on the code of ethics in all-hands meetings, conflict of interest and ethical considerations of SH, partners and suppliers.

Ethics Area	Key Process	Au-thority	KM	Goal	FY 16	FY 17	FY 18
WF Ethics	Code of Ethics	Code	Tr	100%	100%	100%	100%
CI	Governance	LAC	A/C	100%	100%	100%	100%
SH, PS	Contracts	LAC	A/C	NV	NV	NV	NV
A=Accurate, C=Complete, Tr=Trained, CI=Conflict of Interest SH=Stakeholders, PS=Partners & Suppliers; Goal: NV=No Violations							
Sustained High Performance for Ethics							

Figure 7.4-9 *Code of Ethics Training*

7.4a5 Society We have implemented processes to increase the amount of renewable energy (RE) consumed. DPU far exceeds the renewable energy consumption of the state New Mexico as a whole as depicted in **Figure 7.4-10**.
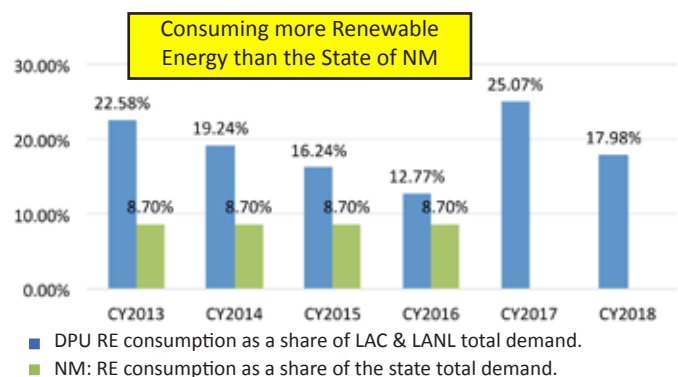
Figure 7.4-10 *Percent of Power Derived from Renewable Energy*

We also perform better than our conservation goal for gas therms per heating degree day (**Figure 7.4-11**).
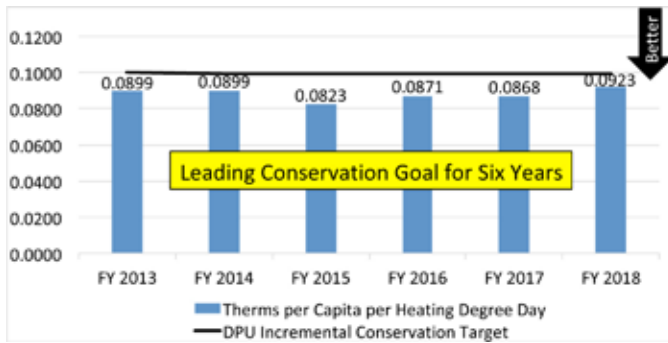
Figure 7.4-11 *Gas Therms per Capita per Heating Degree Day*

To monitor progress in water conservation, we track the gallons per capita of Non-Potable water, **Figure 7.4-12** and Potable Water, **Figure 7.4-13** produced daily.
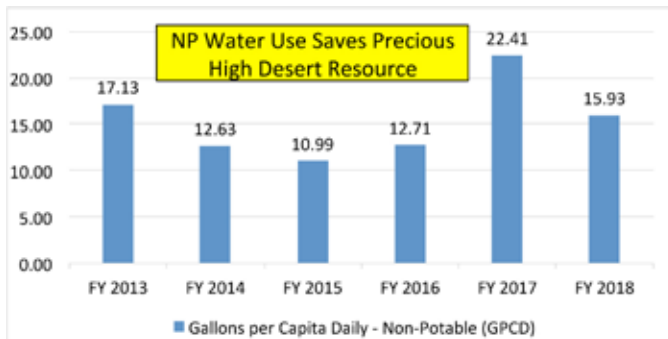
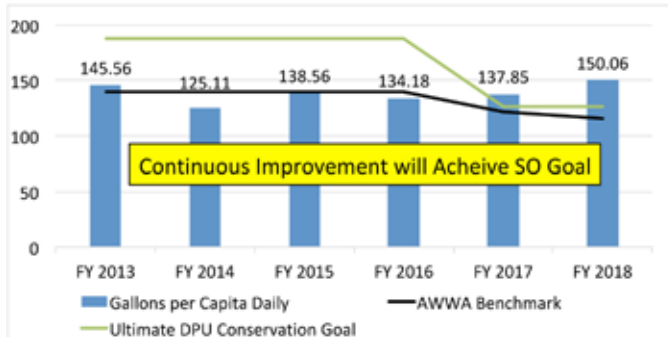Figure 7.4-12 *Gallons per Capita Daily of Non-Potable Water*

Figure 7.4-13 *Gallons per Capita Daily of Potable Water*

We track our use of reclaimed wastewater (**Figure 7.4-14**) and have improved usage greater than 50% since 2013. Reclamation is part of meeting our long-term water conservation goals.
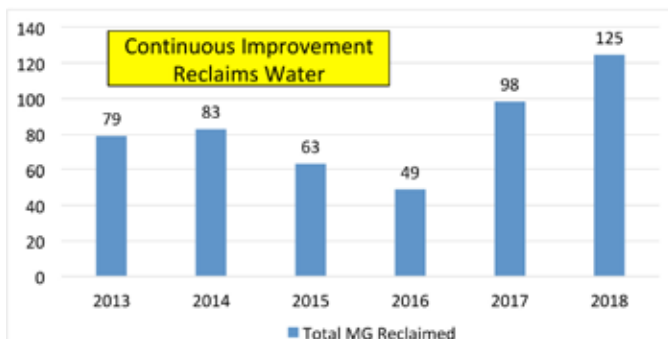
Figure 7.4-14 *Wastewater Treatment Reclaimed Water Use*

We measure the disposition of biosolids by tracking the tons of compost produced in our WT process in **Figure 7.4-15**.
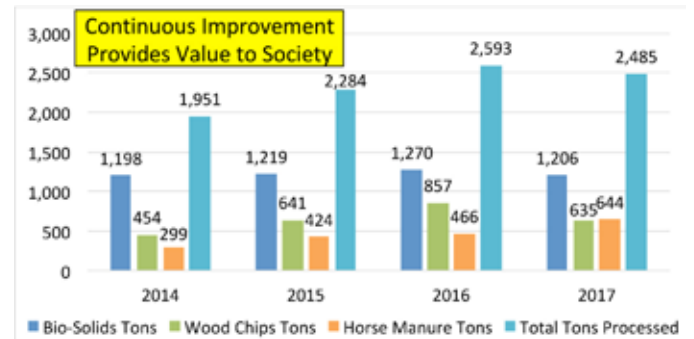
Figure 7.4-15 *Wastewater Treatment Tons of Compost Processed*

Supporting our key communities includes education outreach. We track engagement, **Figure 7.4-16**, by the number of our customers who participate at our community environmental education events on conservation, classroom participation and hands-on demonstrations at Pajarito Environmental Education Center (PEEC).

Period	Amount of $ Spent on Conservation Public Outreach	Hours Spent on Conservation Public Outreach	# of Students Who Received Cons. Ed. in Classroom	# of People Participated in DPU Conservation Demos	Total # of Connections Made by the Conservation Program
2013	$ 18,490.00	553	1,651	250	1,651
2014	$ 20,071.00	532	3,322	422	2,900
2015	$ 28,120.00	409	2,512	1,088	3,600
2016	$ 35,720.00	644	1,995	1,200	3,900
2017	$ 40,257.00	675	2,865	1,470	4,335
2018	$ 46,539.58	785	2,872	1,346	4,218

Sustained Improvement in Society Outreach Increases Conservation Awareness

Figure 7.4-16 *PEEC Participation*

7.5 Financial, Market and Strategy Results
7.5a Financial and Market Results
7.5a1 Financial Performance Results included for financial performance tie directly to the Customer Value (**Figure P.1-2**) by being service oriented and fiscally responsible and Strategic Goal 2.0 Achieve and Maintain Financial Excellence (**Figure 2.1-4**). We track the annual budget target versus expenditures for DPU in **Figure 7.5-1** and then each division in **Figure**
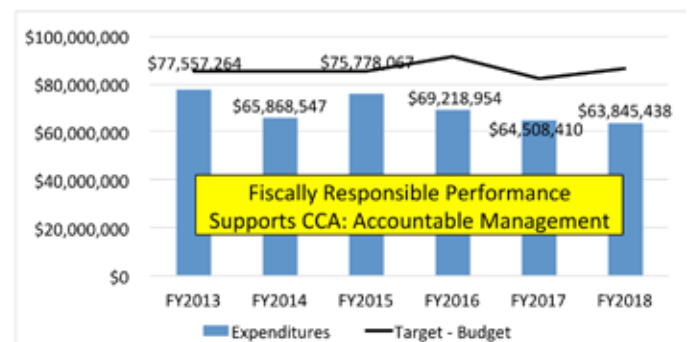
Figure 7.5-1 *DPU Total Budget Performance*

7.5-2 through **Figure 7.5-7**. Some of the unexpended WP budget is due to deferment of major CIP projects, a result of factors outside the control of DPU. Results indicate positive performance and trends in budgetary performance.
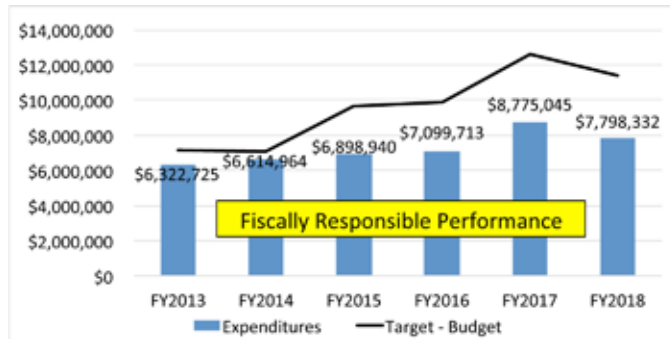
Figure 7.5-2 *ED Budget Performance*
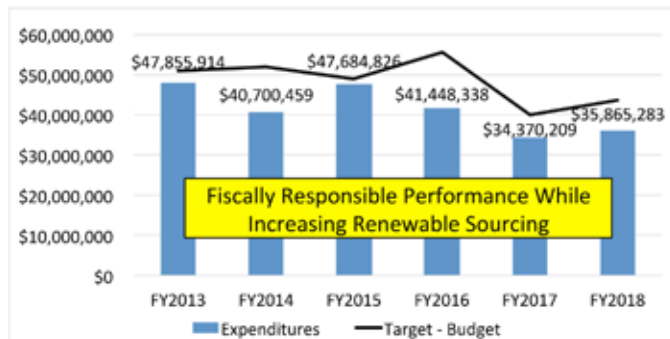
Figure 7.5-3 *EP Budget Performance*
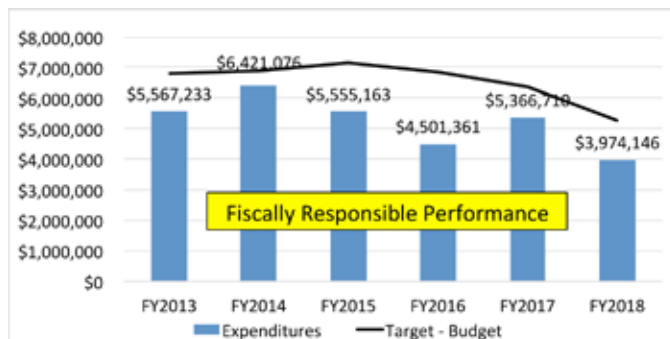
Figure 7.5-4 *GD Budget Performance*
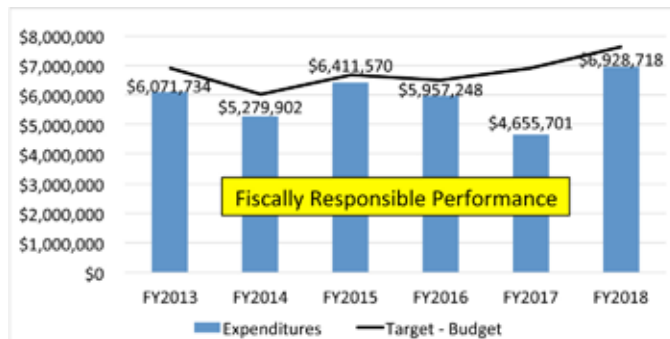
Figure 7.5-5 *WW Budget Performance*
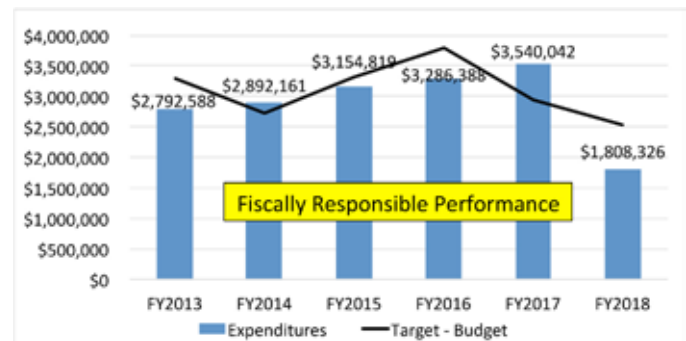
Figure 7.5-6 *WD Budget Performance*
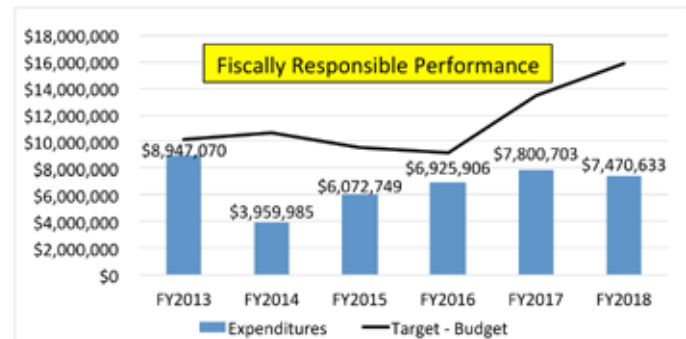
Figure 7.5-7 *WP Budget Performance*

Past due receivables (**Figure 7.5-8**) reflect improvement in working with customers to get their bills paid on time to ensure excellence in financial return and viability.
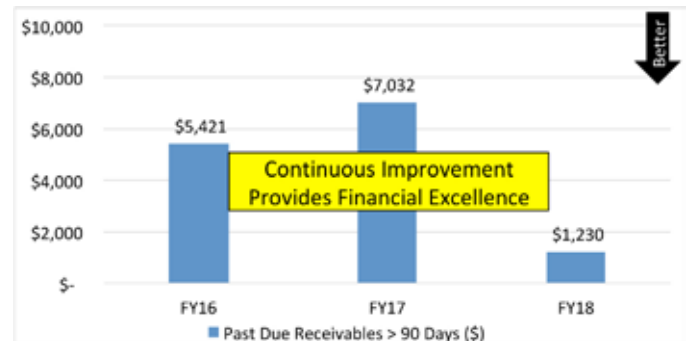
Figure 7.5-8 *Past Due Receivables*

7.5a2 Marketplace Performance Although we have no competition, we measure marketplace performance by assessing our average residential bills against valid comparisons as appropriate or available (**Figure 7.5-9** through **Figure 7.5-12**). The results tie to Strategic Objective 2.1 (**Figure 2.1-4**), *Utilizing revenues to provide high-level service while keeping rates competitive with similar utilities*. Results
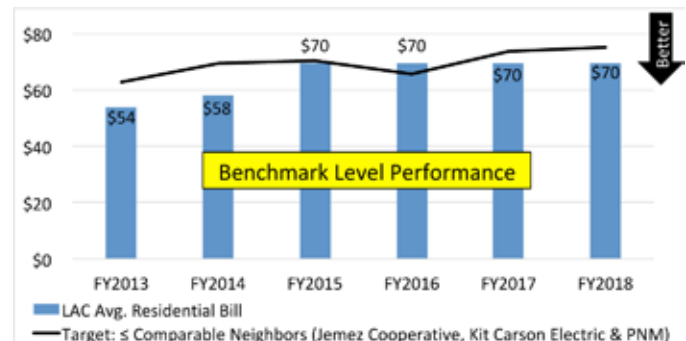
Figure 7.5-9 *Average Residential Bill (Electric)*

indicate benchmark level performance for all utilities.
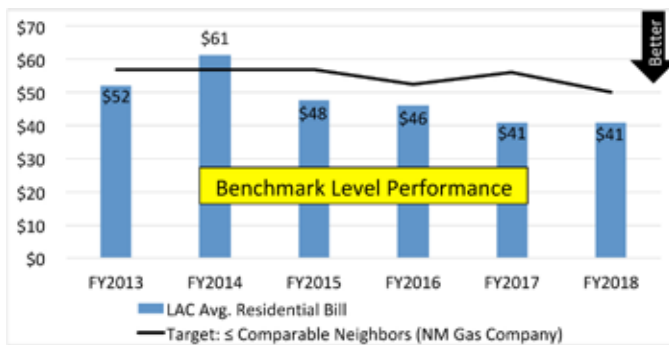
Figure 7.5-10 *Average Residential Bill (Gas)*
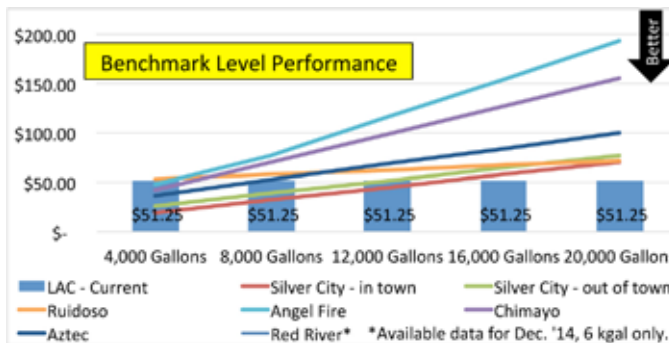
Figure 7.5-11 *Average Residential Bill (Wastewater/Sewer)*
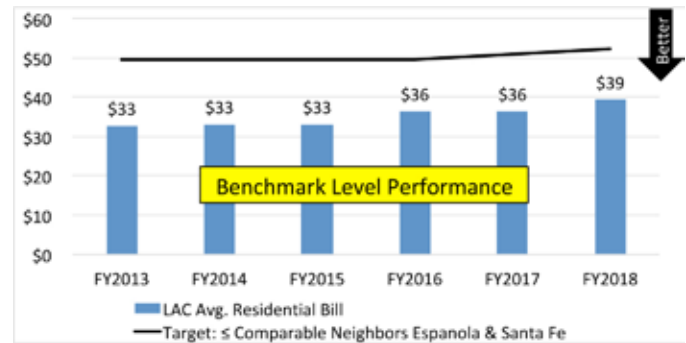
Figure 7.5-12 *Average Residential Bill (Water)*

7.5b Strategy Implementation Results Results for the Strategic Objectives (SO) in **Figure 2.1-4** are included in **Figure 7.5-13** for the last three fiscal years. Most SOs have more than one KPM to monitor and measure success. The full dashboard of KPMs used by SMT is AOS. Excellent results across all goals strengthens existing partnerships with SHs and provides a springboard to new partnerships. Results for recent intelligent risk taking are highlighted below.

Goal/SO Fig. 2.1-4 link	Key Performance Measures (7.x Figure #)	FY 16	FY 17	FY 18
1.1 Water	(WP) Drinking Water Compliance (7.4-5)	100%	100%	100%
1.2 Gas	(GD) PHMSA Reportable Main Pipeline Leaks/ 100 mi. Pipeline (7.1-6)	1.56	3.91	3.13
1.3 Sewer	(WC) Sewer Overflow Events/100 mi. pipeline (7.1-2)	4.24	3.39	2.54
1.4 EP	EAF (7.1-1)	Multiple	Multiple	Multiple
1.5 ED	SAIDI (7.1-2)	0:23	2:04	0:12
1.6 Systems	Management Audit	FY2009	FY2014	FY2019
1.8 Continuous Improvement	Innovation Inventory	AOS	AOS	AOS
2.1 Financial Excellence	Audits (7.4-7)	NV	NV	NV
2.2 Competitive Rates	Comparative rates Electric, Gas, Sewer, Water (7.5-9 thru 12)	Multiple	Multiple	Multiple
2.3 Meet Targets by 2025	Budget vs. Expenditures – Department (7.5-1)	$69M	$64M	$64M
2.4 Achieve Plans	Budget Performance (7.5-2 thru 7)	Multiple	Multiple	Multiple
3.1 Customer	Net Promoter Score (7.2-6-7)	N/A	FY2015	F72017
3.2 Stakeholders	Public Communication (7.2-4)	Multiple	Multiple	Multiple
4.1 Invest in WF	Professional Development (7.3-11)	69%	N/A	75%
4.2 Safe/ethical	OSHA Incident Rate (7.1-27)	7.3	6.8	1.3
4.3 WF Engagement	WF Survey: Employee Engagement (7.3-8)	63%	N/A	68%
5.1 Carbon Neutral	(EP) % Power Derived from renewable energy (7.4-10)	13%	25%	18%
5.2 Conservation	PEEC: #People Reached by Programs (7.4-16)	3,900	4,335	4,218
5.3 Reduce Water Use	Gallons per Capita (Potable) (7.4-13)	134	138	150
5.4 Reduce Gas 3%	(GD) Therms/ Capita/ Heating Degree Day (7.4-12)	.087	.086	.092
6.1 Partnerships	DPU operation is improved by our Partnerships	N/A	N/A	83.3%
At or Above Goal				
Approaching Goal				
Area to Improve				
Excellent Results in Every Strategic Goal Area				

Figure 7.5-13 *Strategy Achievement*

2019

STRATEGIC LEADERSHIP PLAN

LOS ALAMOS

Vision

Los Alamos is a world-renowned community where discovery and innovation are inspired by its dramatic history and magnificent mountain setting. We offer extraordinary educational, recreational, and cultural opportunities in a vibrant small town atmosphere.

Communication & Transparency

Quality of Life

Economic Vitality

Housing
Local Business
Social Services
Open Space, Recreational, & Cultural Amenities
Long-Term Vacancies

Infrastructure Services

Quality Governance

In January, 2019, the Los Alamos County Council identified 7 strategic priorities; these were subsequently adopted on February 5, 2019. These priorities address issues important to the community that the Council agrees to focus and make progress on in the coming year; they are hard and cross-cutting and will support and help enable multiple initiatives currently underway. This does not mean that the county will only work on and invest in these priorities; they are a tool to help assure that in the context of all of the ongoing county efforts, a focus on a few high-level, important but challenging goals is maintained.

For each of these priorities, concrete actions for addressing them will be identified. Additionally, multiple mechanisms will be used to promote engagement with the community to clearly and more broadly communicate what the priorities are and elicit ideas and creative solutions for making progress. The status of the priorities will be reviewed and reported on a regular basis.

Ongoing improvement in communication and transparency in county policy setting is an overarching Council goal that will be a component of all our efforts.

These priorities were identified in the context of uncertainty regarding the County's Gross Receipts Tax revenue; it is understood that addressing priorities that require funding outlays will be contingent on the resolution of this uncertainty.

Priority Areas

Increasing the amount and types of housing options.

This includes a variety of housing options for all segments of the community, from affordable, entry level, and live-work housing to new options for those interested in downsizing or moving closer to central areas of the community.

Enhancing support and opportunities for the local business environment.

This includes appropriate support for existing businesses, growing new businesses, and supporting technology start-ups and spin-offs.

Addressing long-term building vacancies in our community.

Land availability in Los Alamos County, and in particular in the downtown areas, is limited and there is a desire to work towards better utilization, opportunities for new businesses, and improved aesthetics.

Protecting, maintaining and improving our open spaces, recreational, and cultural amenities.

Los Alamos County open spaces and cultural attractions are greatly valued by the community and provide opportunities for recreational and economic growth; appropriately allocating resources to ensure their health and sustainability is important to our citizens.

Supporting social services improvement.

Behavioral, mental and physical health and social services are important quality of life components; there are key areas where appropriate types and levels of county support could help address current needs.

Investing in infrastructure.

Appropriately balancing maintenance of existing infrastructure with new investments in county utilities, roads, facilities and amenities will help improve environmental stewardship, sustainability, and quality of life.

Planning for appropriate levels of county services.

Making sure we understand the level of services our citizens want will allow us to make appropriate investments in processes and staff to achieve them.

As noted, establishing these priorities is intended to help maintain focus on issues important to the community and support and help enable multiple ongoing initiatives important to the future of our community. These initiatives have benefitted from significant public involvement, time, and expertise and it is essential that we continue to work on:

Implementation of the 2016 Comprehensive Plan, including an emphasis on neighborhoods and effectively managing commercial growth.

Implementation of the 2018 Tourism Strategic Plan.

Utilizing the recommendations of the Community Development Advisory Board.

Addressing issues noted in the 2018 State of Health in Los Alamos.

Pursuing key goals described in 2018 DRAFT Los Alamos County Economic Vitality Plan.

Partnering with Los Alamos Public Schools and the University of New Mexico-Los Alamos, as appropriate, to support the high-quality educational opportunities in the community.

Maintaining and improving transportation and mobility.

Strengthening coordination and cooperation between County government, LANL, and regional and national partners.

Collaborating with Los Alamos National Laboratory as the area's #1 employer.

Work towards the Department of Public Utilities Strategic Goals and integration of these efforts with activities in support of the County's strategic priorities will be essential for achieving desired outcomes effectively and efficiently; mechanisms for improving this integration are being implemented.