



*Platte River*  
POWER AUTHORITY

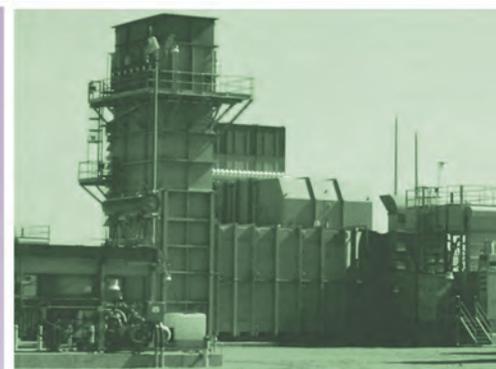


# STRATEGIC PLAN 2015-2025

**OUR VISION:** As a respected leader and responsible energy partner, improve the quality of life for the citizens served by our owner communities.

**OUR MISSION:** Provide safe, reliable, environmentally responsible, and competitively priced energy and services.

[www.prpa.org](http://www.prpa.org)



# VALUES

**SAFETY** Working safely and protecting the public, our employees, and the assets we manage is non-negotiable.

**INTEGRITY** Being ethical and holding ourselves accountable to conduct business in a fair, honest, open, compliant, and environmentally responsible manner is at the core of what we do.

**CUSTOMER SERVICE** Providing quality service at a competitive price while being responsive to our owners’ needs creates added value and improves customer satisfaction.

**RESPECT** Encouraging constructive dialogue that promotes a culture of inclusiveness, recognizes our differences, and accepts varying viewpoints will lead us to optimal solutions for even the most difficult challenges.

**OPERATIONAL EXCELLENCE** Engaging employees to strive for excellence and continuous improvement ensures that we provide reliable service while managing costs and creating a rewarding work environment.

**SUSTAINABILITY** Maintaining financial integrity, minimizing our environmental impact, and supporting responsible economic development in our owner communities ensures the long-term viability of the organization and the communities we serve.



**INNOVATION** Supporting the development of technologies to promote the efficient use of electricity, protect the environment, and create a diversified energy supply portfolio mitigates risk and creates opportunities.

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# MESSAGE FROM THE GENERAL MANAGER



**JACKIE SARGENT** General Manager

The need to manage current challenges and opportunities while simultaneously planning for an ever-changing business environment is a test faced by every successful organization. Platte River Power Authority’s strategic planning process is collaborative, dynamic, and an iterative approach to meeting this challenge, with a focus on a 10-year planning horizon. Let me begin by expressing my sincere appreciation and thanks to our board of directors and the Platte River team for their commitment to, and valuable support of, this important effort.

## ACTIONS FUEL SUCCESS.

I’m proud to share that as a result of the heightened focus on our nine key initiatives, we have achieved significant successes in 2014. Some examples include:

- Increased our focus on safety and promotion of a “safety-first” culture;
- Implemented “Industrial Athlete”, a customized stretching program to reduce workplace injuries;
- Utilized a cross-functional project team to develop a comprehensive security policy to protect our systems and facilities and help manage our compliance efforts;
- Implemented a framework for improved project management and initiated quarterly project update meetings;
- Completed annual review with credit agencies, which resulted in our AA credit rating being affirmed;
- Continued to evaluate the budget process and implemented new tools to provide better coordination with project management;
- Maintained high levels of reliability and availability of the Rawhide Energy Station;
- Completed phase I of the Rawhide control system upgrade project;
- Finalized evaluation of joint dispatch opportunities and executed a Joint Dispatch Agreement with Public Service Company of Colorado and Black Hills Energy to take effect January 1, 2015;
- Collaborated with the municipalities to develop the Efficiency Works™ efficiency assistance and rebate program, and its website [efficiencyworks.co](http://efficiencyworks.co);
- Increased outreach to community stakeholders with input sessions and presentations to councils, boards, customers, and other groups;

## PLATTE RIVER POWER AUTHORITY

is a not-for-profit wholesale electricity generation and transmission provider that delivers safe, reliable, environmentally responsible, and competitively priced energy and services to its owner communities of Estes Park, Fort Collins, Longmont and Loveland, Colorado for delivery to their utility customers.

- Initiated and executed a leadership culture survey to help create alignment of leadership behaviors and execution of strategic initiatives;
- Conducted employee information meetings to support our strategic planning efforts, the *Integrated Resource Plan* project, and the Environmental Protection Agency (EPA) proposed Clean Power Plan;
- Hired staff and acquired tools and resources to bring sophisticated planning and modeling efforts in house;
- Negotiated and executed power purchase agreements for 60 MW of additional wind energy and issued an RFP for utility scale solar; and
- Re-convened joint teams with the municipalities and formed new ones to enhance collaboration and communication regarding load forecasting, coordinated demand response, rate planning, and distributed renewable resource integration.

## PLANNING PROMOTES CONFIDENCE.

The *2015-2025 Strategic Plan* identifies opportunities with which we stand to make the greatest improvements and those areas where we need to mitigate risk. Although we are in good financial standing and our core business is sound, our work is not done. During the coming decade, our adaptive strategies will focus on diversifying our energy supply portfolio using a comprehensive analysis process to develop and update our *Integrated Resource Plan*. We will seek opportunities to optimize our assets (infrastructure, natural, and human resources) and hone partnerships with our various stakeholders. Decisions come with financial implications, hence the need for reasonable forecasting, scenario modeling, and risk management.

## RELATIONSHIPS MATTER.

Through improved two-way communications and high levels of employee engagement and ownership of the strategic process, team members at every level within Platte River will be in a position to make meaningful contributions toward the initiatives and goals outlined in this document. The intrinsic understanding and alignment around Platte River's values and collective goals will help to better promote organizational success.

Externally, our focus will remain on our owner communities and assisting them with their energy needs. Time and attention will be spent with regulators, legislators, and other key decision makers. Through education, collaboration, and a willingness to do what is in the best interest of customers, we will navigate the changing business environment with confidence.

Input from stakeholders gathered at community listening sessions held in 2013 was incorporated into the 2014 edition of the *Strategic Plan*. While no additional stakeholder outreach was conducted specifically for this update of the *Strategic Plan*, additional listening sessions were held this past March as part of the process for developing our next *Integrated Resource Plan (IRP)*. Community involvement and stakeholder engagement is important to Platte River. As part of this ongoing effort our 2015 focus on stakeholder involvement will continue to be in conjunction with the development of our new *IRP*.

Although we have significant challenges to address in the coming years, as outlined in this Plan, I am confident that in working together we will tackle these issues head on. As a united team, Platte River employees look forward to proudly serving the energy needs of our owner communities in a safe, reliable, environmentally responsible, and competitively priced manner.



# BOARD OF DIRECTORS



**PLATTE RIVER POWER AUTHORITY** is a joint action agency and political subdivision of the State of Colorado. It is governed by an independent eight-member board of directors that provides local decision making and control. The board has been actively involved in the development of the **2015-2025 STRATEGIC PLAN**.

# SENIOR MANAGEMENT TEAM

**John Bleem**  
Strategic Planning &  
Customer Service Director

**Joseph Wilson**  
General Counsel

**Jason Frisbie**  
Chief Operating Officer

**Karin Hollohan**  
Corporate Services Director

**Deborah Schaneman**  
Environmental Services &  
Compliance Director

**Jackie Sargent**  
General Manager  
/ CEO

**David Smalley**  
Chief Financial & Risk Officer



**PLATTE RIVER POWER AUTHORITY** operates under the direction of a general manager who serves at the pleasure of the board of directors. Platte River's senior management has extensive experience, with an average of over 25 years of service in the utility industry.

# INTRODUCTION

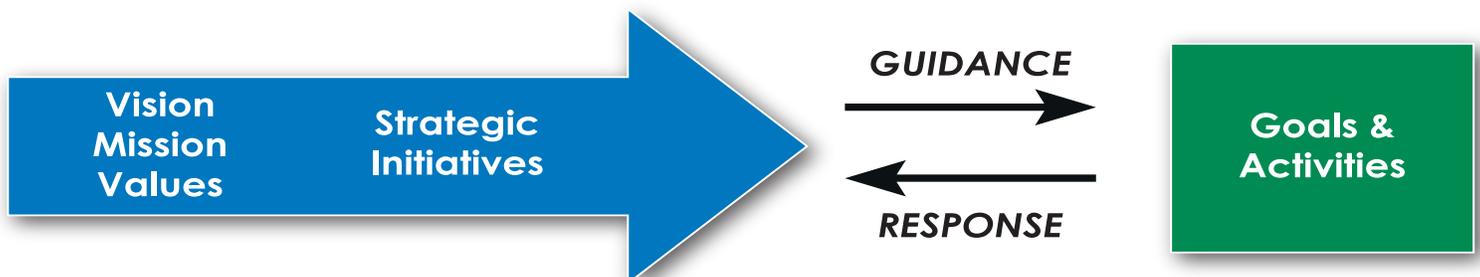


This *Strategic Plan* provides an update to the 2014 *Strategic Plan*, approved by the Platte River Power Authority Board of Directors in 2013. Platte River anticipates developing an updated *Strategic Plan* each year going forward, with a ten year planning horizon (currently 2015-2025). Planning efforts continue to evolve as new challenges and opportunities arise. Platte River moves forward from a position of strength, with highly competitive wholesale rates, an excellent record of reliable operations, and a proactive environmental record for operating existing resources. These strengths have been established and bolstered over time by our dedicated, highly skilled employees and the support and oversight of our board of directors.

Over the next several years, Platte River faces many challenges including climate change, new environmental legislation and regulations related to coal generation, aging infrastructure, fuel and market price volatility, threats to physical and cyber security, an aging workforce, increasingly diverse preferences of the municipalities, and transitions in wholesale markets. To address these challenges, we continue our

focus on increasing flexibility by adopting innovative solutions while building on existing strengths. Direction for our efforts is established by a set of strategic initiatives, which have been updated for this plan. These initiatives flow from Platte River's Vision, Mission, and Values and provide guidance for establishing specific actionable goals and tactics that move us forward. The connection between initiatives and goals/tactics is intended to be interactive, with high level direction and focus provided by the initiatives and creative responses expected from managers and employees to find optimal goals and activities that fulfill the initiatives.

Managers and employees continue working together to identify specific goals and activities that support the strategic initiatives. In turn, the goals and activities are integrated into annual work plans. Our employees and teams need a clear, common understanding of the initiatives to provide a "line of sight" that ensures common priorities and focus. These efforts will require an ongoing/multi-year process, which will continue during 2015 and beyond.



# STRATEGIC INITIATIVES

An updated set of strategic initiatives has been developed for 2015 forward. These statements are intended to provide high level direction and focus for all divisions within Platte River. All are critical to Platte River's success.

## SAFETY

Platte River promotes a culture of safety, consistent with the organizational philosophy that no job is so important and no service so critical that an employee must compromise their own safety to perform their job.

## COMPLIANCE

Platte River promotes a culture of compliance consistent with the organizational philosophy that all employees conduct business with the highest standards of ethics and integrity. We strive to meet or exceed all policy and regulatory requirements.

## FINANCIAL STABILITY

Platte River maintains long-term financial stability by generating adequate cash flows, maintaining access to low cost capital, providing stable and competitive wholesale rates, and effectively managing financial risks. We seek continuous improvements in the efficiency and effectiveness of budgeting, risk analysis, and financial reporting.

## OPERATIONAL EXCELLENCE

Platte River designs, constructs, operates, and maintains safe, reliable, and environmentally responsible generation and transmission assets in a cost effective manner. We strive to optimize the value of physical and personnel assets, manage risk, and preserve a competitive advantage.

## EXCEPTIONAL CUSTOMER SERVICE

Providing exceptional customer service to both internal and external customers is fundamental to Platte River's success. Services are continuously improved by maintaining a high level of knowledge regarding customer needs and preferences, identifying and tracking key performance metrics, developing future program/services, and enhancing relationships.

## EMPLOYEE ENGAGEMENT

Employees are critical to Platte River's success. By continuing to invest in our employees we leverage diversity, grow internal talent, develop innovative skills, and maintain high standards. Platte River strives to create a work environment that encourages employees to be engaged at all levels of the organization to achieve outstanding performance and identify opportunities for continuous improvement. We are committed to open, honest, and effective communication so employees are well informed and positioned to meet the needs of the organization and the communities we serve.

## DIVERSIFIED ENERGY SUPPLY PORTFOLIO

Identify and evaluate options for diversifying Platte River's future mix of generation resources – integrating both supply and demand side technologies and capitalizing on regional competitive strengths – such as proximity to natural gas, coal, wind, and solar resources; and local/regional energy technology research and development. Evaluation of resource decisions must balance costs, rate impacts, risks, and environmental considerations – while maintaining safety, compliance, and system reliability.

## COLLABORATION AND COMMUNICATION

Continuously improve collaboration and communication – internally and externally – for project management, cross-functional teams, joint planning, expanding and improving programs and services, enhanced stakeholder communications, and resource leveraging. Enhanced collaboration and communication highlights the value of Platte River to its stakeholders. Platte River will continue outreach efforts to promote regional cooperation and planning with other electric generation and transmission utilities.

## TECHNOLOGICAL INNOVATION AND SUSTAINABILITY

Actively monitor and advance the utilization of new/emerging technologies to enhance performance and promote the long-term viability of Platte River, the municipalities, and their customers.

# STRENGTHS, WEAKNESSES, OPPORTUNITIES AND THREATS (SWOT)

As part of the process of considering how to ensure the long-term success of Platte River and its municipalities, a SWOT analysis is updated each year. The most recent includes the list of items below. This type of analysis will continue as part of the ongoing strategic planning process and the list will likely change over time.

## STRENGTHS (Internal Focus)

- Strong financial position
- Technical and operational expertise
- Well constructed and professionally maintained power plants and transmission infrastructure
- Lowest wholesale rates in Colorado
- Excellent reputation/well respected in the industry
- Culture of commitment and operational excellence

## WEAKNESSES (Internal Focus)

- Lack of adaptive strategy
- Lack of diversity in electricity resources
- Lack of bench strength & succession planning
- Leadership development
- Lack of energy market knowledge and experience
- Need better alignment of organizational culture with new strategies
- Employee communications

## OPPORTUNITIES (External Focus)

- Community involvement
- Coordination of key initiatives with the municipalities' planning efforts
- Asset optimization – water, transmission, generation, and sales
- Increased communication and educational outreach – including joint branding
- Leverage resources for improved efficiency
- Partnering with the municipalities and other entities to create regional collaboration
- Partnership with others to build generation

## THREATS (External Focus)

- Regulatory and legislative uncertainty
- Looming knowledge loss as employees retire
- Lack of process documentation
- Long term reliable water supply – need for firming project
- Fuel price volatility including transportation costs
- Potential loss of tax exempt financing
- Continued consolidation of large utilities so there are fewer players in the market
- Litigation

# KEY OPERATIONS GOALS AND ACTIVITIES

Key operational activities for 2015 and beyond are summarized in this section. All are focused toward meeting strategic initiatives. Status regarding these activities – and others as they are developed over time – will be periodically reported to the board of directors.



## RAWHIDE ENERGY STATION MAINTENANCE OUTAGE

A six-week maintenance upgrade for the Rawhide Energy Station is planned for the fall of 2015. This will be the most extensive maintenance effort since 2005, and will be completed safely and cost effectively.

## RENEWABLE ENERGY SUPPLY INTEGRATION

Platte River's total wind generation resources will reach 78 MW for 2015 forward, more than four times the historical level. Also, 30 MW of new solar generation is being considered at the Rawhide Energy Station. The focus during 2015 will be toward efficiently integrating new renewable sources into Platte River's operations - considering transmission, surplus sales, resource scheduling, ancillary services, and emissions mitigation.

## NEW WATER POLICY

Platte River will manage water resources through a comprehensive, Board approved water policy that facilitates asset utilization and optimization both now and into the future.

## NERC AUDIT

Staff will complete the February 2015 North American Electric Reliability Corporation (NERC) reliability audit with a goal of no violations.

## SUCCESSION PLANNING

Design a leadership development program that identifies potential successor candidates for all levels of supervision and builds current and emerging leadership skills to support Platte River's mission and strategies.

## PROJECT MANAGEMENT

Our focus on enhancing project management and processes will continue. During 2015 we will implement a project management framework to improve results on major projects.

## EPA CLEAN POWER PLAN

During 2015 staff will actively be engaged in the process of formalizing the final rule by submitting comments, working with industry affiliations, meeting with regulators, and analyzing impacts.

## DEBT FINANCING

During 2015 staff will analyze financing options and make a recommendation for Platte River's next debt issuance.

## FUNDING OPPORTUNITIES

Actively seek external funding for new technology applications in areas that provide benefits to the municipalities and Platte River.

## CLIMATE CHANGE AND RESILIENCE

Through Platte River's *IRP* effort, we will consider the potential impacts of climate change and the need for resilient infrastructure investments; while taking into account the various outlooks of the Municipalities regarding this issue.

# KEY OPERATIONS GOALS AND ACTIVITIES CONTINUED



## EMPLOYEE ENGAGEMENT

Continue our commitment that employees have the appropriate tools, technology, training, and resources to effectively carry out their jobs, now and into the future.

## INTEGRATED RESOURCE PLAN (IRP)

A new electric resource plan will be developed that integrates renewable energy, demand side management (including energy efficiency and distributed generation), fuel diversification, and greenhouse gas reduction – while mitigating risk and ensuring reliability, compliance, and competitive rates. The following guidelines will be used for evaluating resource options:

- CO<sub>2</sub> emissions 20 percent below 2005 levels by 2020 and 80 percent below 2005 by 2050;
- Renewable resources at 20 percent of retail energy supply by 2020 (not including federal hydropower);
- Maintain a minimum 15 percent planning reserve margin;
- Remain the lowest cost wholesale power provider located in Colorado.

Through our *IRP* process, we will also consider the potential impacts of climate change on both energy and water resources.

## LEGISLATIVE POLICY ENGAGEMENT

Work with our local, state, and federal regulatory agencies

to encourage a favorable political climate for our continued operations.

## DEMAND RESPONSE (RETAIL LEVEL)

Through ongoing joint efforts, the municipalities and Platte River have agreed that a coordinated and collaborative effort will be required to maximize net system benefits of demand response going forward. During 2015, staff will continue to seek load control approaches that provide benefit to the system and to individual municipalities through data sharing and enhanced system-wide communications.

## RATE PLANNING AND COORDINATION

Continue collaboration with the municipalities regarding future rate planning, including development of long-term rate projections and potential changes to rate structure.

## REGIONAL UTILITY JOINT DISPATCH (WHOLESALE LEVEL)

During 2015, Platte River will participate in a joint dispatch effort with regional utilities at the wholesale level. We will monitor and measure the effectiveness of continued participation.

## IMPROVING PROGRAMS AND SERVICES

Expand collaborative efforts with the municipalities, leveraging resources, and utilizing regional cooperation to expand service offerings and programs in the areas of telecommunications, renewable energy, and demand side resources.

# RESOURCE PLANNING



Platte River has been active in resource planning since its inception over 40 years ago. Four IRPs have been produced since the mid-1990s, leading to the addition of five simple cycle natural gas peaking units and providing guidance for expanding demand side management (DSM) and renewable energy resources.

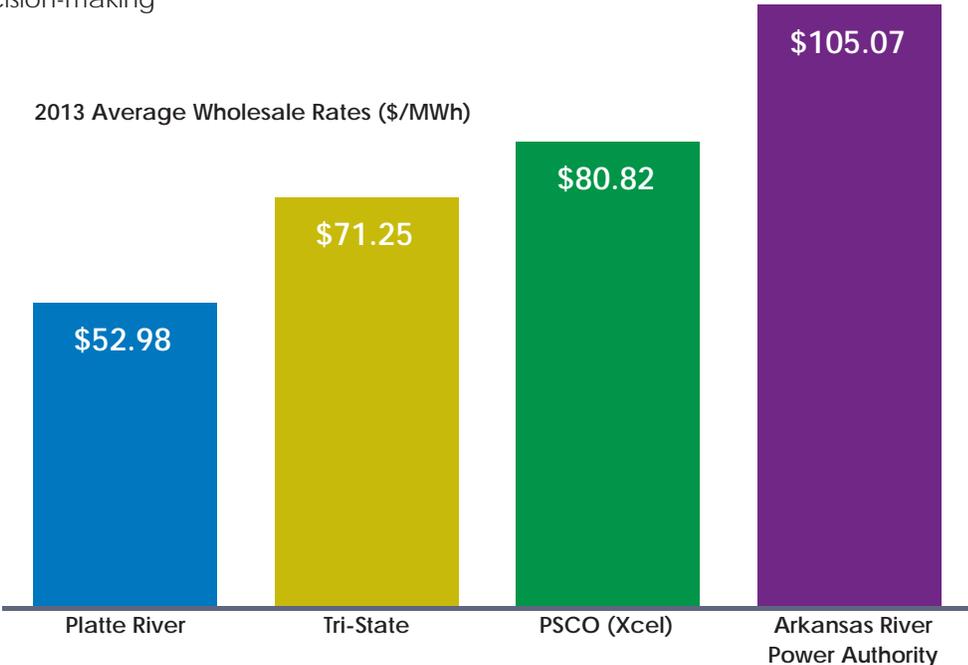
During the past year, Platte River has made efforts to strengthen its capabilities in resource planning by adding staff with specialized planning skills, installing new software for detailed production cost analysis, and integrating operational and financial models into a more robust cost/risk modeling framework. The commitment to forming a new planning department and increasing cross-functional collaboration on resource planning across the organization will provide stronger decision-making capabilities.

Platte River is currently developing a new IRP for 2015, which will employ guidance from this Strategic Plan to develop recommendations for Platte River’s long-term portfolio decisions. The new IRP will be integrated into future strategic plans.

Platte River and its owner municipalities enter the next era of resource planning from an excellent position. With strong financial ratings, the lowest rates among wholesale electricity suppliers located in Colorado, a robust and reliable electric system, and solid environmental performance record from existing resources, Platte River can move forward from a position of strength.

## RATES

Balancing costs with risk mitigation will be a key consideration going forward. Even though rates have increased significantly over the last several years, Platte River’s rates remain the lowest among wholesale electricity suppliers located in Colorado.



# RESOURCE PLANNING CONTINUED

## RESOURCE MIX

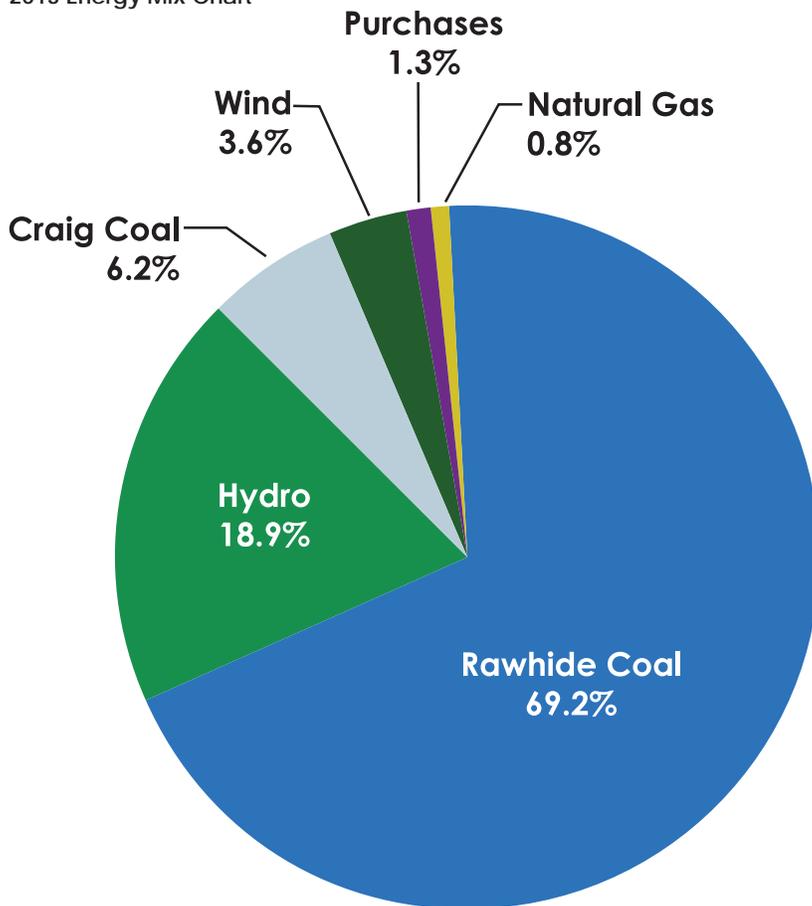
From a capacity perspective, Platte River has a relatively well diversified generation portfolio, comprised of the following sources:

- Coal – 434 MW
- Natural Gas – 388 MW (summer)
- Hydroelectric – 91 MW (summer)
- Wind – 78 MW (intermittent)

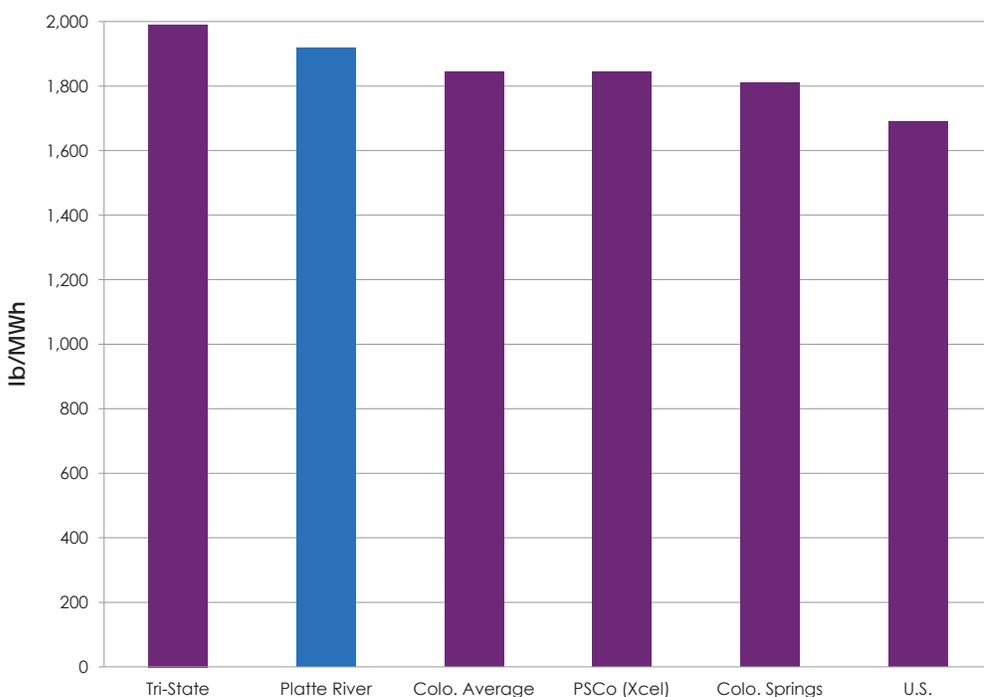
Based on current load forecasts (see Appendix A), Platte River is not expected to need additional capacity until about 2030. However, to increase resource diversity and reduce emissions, Platte River added new wind resources during 2014 and a solar facility is being considered for the Rawhide Energy Station site.

From an energy supply perspective, coal generation dominates Platte River's deliveries to its municipalities, with baseload hydropower filling out most of the balance of energy delivered.

2013 Energy Mix Chart



Colorado Fossil Fuel Plant CO<sub>2</sub> Emissions Comparison – By Owner/Operator



Platte River's average CO<sub>2</sub> emissions are above the Colorado average and the U.S. national average. Platte River ranks second among wholesale electric suppliers located in Colorado. While CO<sub>2</sub> emissions from power plants are not currently regulated, it is prudent for Platte River to consider CO<sub>2</sub> emissions in future planning.

Many options exist for reducing Platte River's CO<sub>2</sub> emissions, including increased renewable energy sources (utility scale or distributed), increased energy efficiency and DSM (at customer, distribution, and generation levels), integration of distributed generation resources, increased use of natural gas generation vs. coal, and other emerging technologies.

# RESOURCE PLANNING CONTINUED



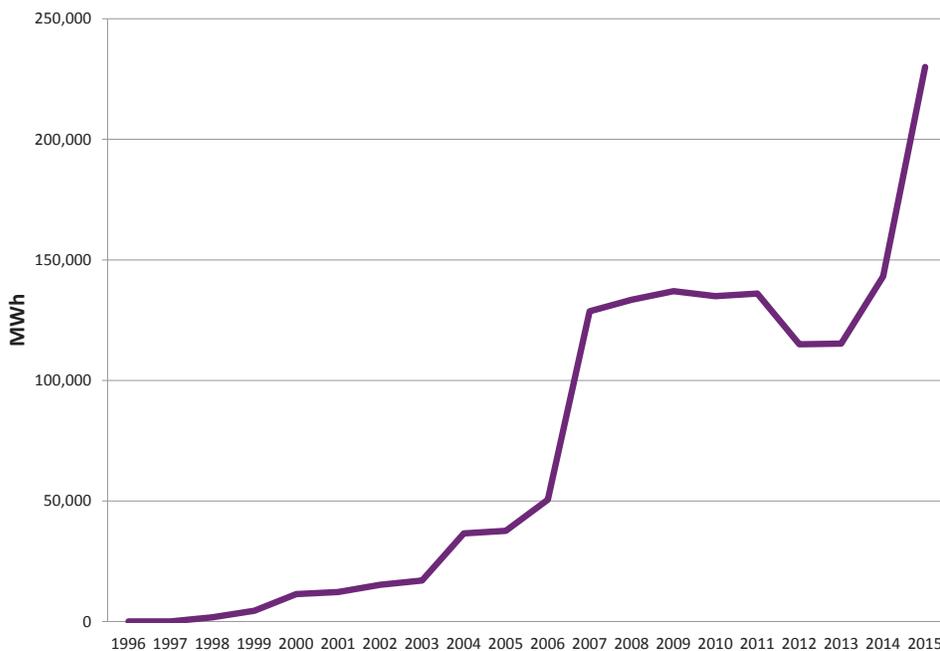
## POTENTIAL SOLAR GENERATION

In late 2014, Platte River issued an RFP for 30 MW of utility-scale solar to be installed at the Rawhide Energy Station. Pending board approval and successful contract negotiations, this new resource has the potential to increase the renewable energy supplied to the municipalities by 2 percent in 2016.

## LOAD FORECAST

The 2015 Official Load Forecast for the Platte River system is included as Appendix A. This forecast indicates significantly slower municipal load growth than predicted by earlier forecasts. *IRP* modeling and associated analysis has been modified to include load forecast changes.

Wind Sales to the Municipalities



## NEW WIND GENERATION

By 2015, a total of 78 MW of wind generation is expected to be included within Platte River’s resource mix. This is more than four times the level of wind generation operating in 2013 (18 MW). New wind resources are expected to increase total wind sources (including renewable energy credits) to about 11 percent of Platte River’s energy supply mix. Wind and hydropower combined will make up about 30 percent of the total energy supply to the municipalities in 2015.

# RESOURCE PLANNING CONTINUED

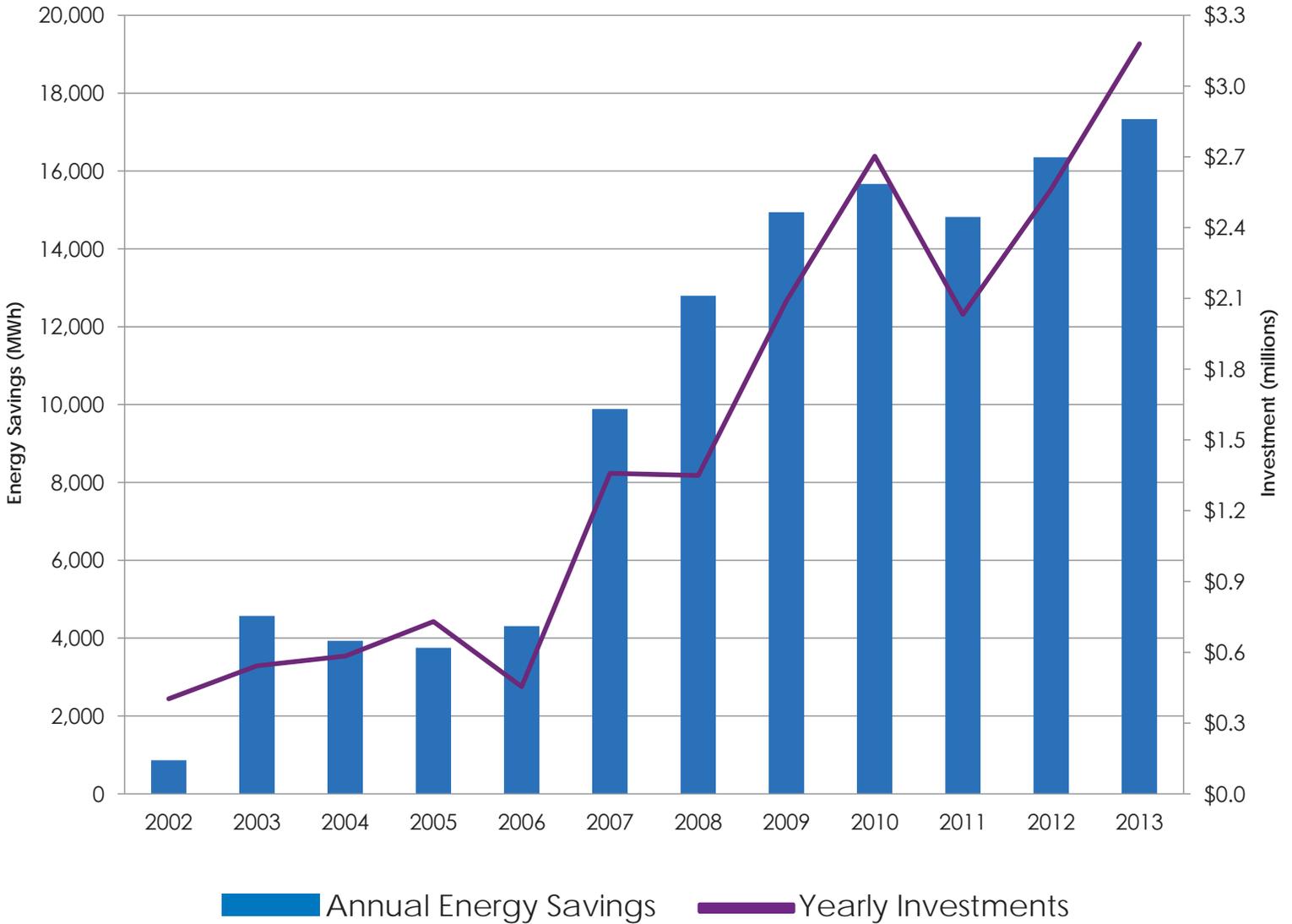
## DEMAND SIDE MANAGEMENT

DSM has been a valuable resource for Platte River and an important service to the municipalities for many years. Through collaborative activities including the recent

Efficiency Works™ branding effort, the municipalities and Platte River have expanded DSM programs and services significantly.



Energy Efficiency-Investments and Savings



# RESOURCE PLANNING CONTINUED

## TRANSMISSION SYSTEM

Platte River’s *Ten-Year Transmission Plan* is updated annually to assure that an adequate transmission system is planned for the reliable delivery of electricity to the municipalities and other Platte River transmission customers. The planning studies and reliability assessments for the near-term and long-term planning horizons

demonstrate that the transmission system meets performance requirements of the Western Electricity Coordinating Council (WECC) and NERC. A summary of planned transmission projects is provided in the table below.

## PLANNED TRANSMISSION PROJECTS

IN-SERVICE	PROJECT NAME	DESCRIPTION	PURPOSE
November 2014	Crossroads 115kV Substation Expansion	Add 115/12.47kV transformer T2 and a ring breaker.	New delivery point to serve growing load.
May 2016	Laporte 230kV Substation Expansion	Add a 230 kV breaker-and-a-half yard, convert the Laporte-Laporte Tap 115 kV lines (two to Rawhide, one to College Lake, and one to Timberline), and add a 230/115 kV transformer T2 for a second source to the Laporte 115 kV.	Improve system reliability in the Fort Collins area.
May 2017	Boyd 230/115kV Substation Expansion	Add 230/115kV transformer T2.	Improve system reliability in the Loveland area.
May 2019	Fort Collins Northeast 115/13.8kV Substation	Considering sites near Timnath or Cobb Lake 115kV Substations to locate additional 115/13.8kV transformer(s).	New delivery point to serve growing load.
May 2019	Valley 115kV Substation Expansion	Add 115/12.47kV transformer T3.	New delivery point to serve growing load.
May 2020	Timberline 230/115kV T3 Replacement	Replace 230/115kV transformer T3 with new transformer.	Improve system reliability in the Fort Collins area.
May 2021	Rawhide Plant Generator Step-Up (GSU) Transformer Replacements	Cycle through replacing Rawhide Unit 1 GSU Transformers (3 + 1 spare) in coordination with major Rawhide plant outage.	Satisfy maintenance and reliability requirements.

The transmission project list does not include transmission infrastructure additions that may be needed to support new generation resources on the Platte River system. The timeframe to build a new transmission line could be

seven years or more considering transmission planning, right-of-way acquisitions, permitting, design, procurement, and construction. Details of transmission infrastructure requirements will be addressed as part of the next *IRP*.

# RESOURCE PLANNING CONTINUED



## PUBLIC PARTICIPATION

Platte River is expanding its engagement with stakeholders in key areas and will seek input as part of the process for developing the next *IRP*. Gathering of stakeholder input began with coordinated survey efforts among the municipalities and Platte River in late 2013 and early 2014. Resource planning questions were included in Fort Collins, Longmont, and Loveland surveys to gauge customers' desire for Platte River to reduce its carbon emissions and increase its renewable supply portfolio. Another round of listening sessions held in all the municipalities during the spring of 2014 expanded citizen participation, and an interactive webinar gave citizens an additional opportunity to provide input. A summary of stakeholder input received to date was provided to the board of directors in September 2014. Additional stakeholder engagement efforts will be designed and implemented during 2015.

# RISK MANAGEMENT

In 2004, Platte River began developing a stand-alone Risk Management Plan. This plan is now included in the *Strategic Plan* as Appendix B.

The Risk Oversight Committee consisting of the general manager and senior management is charged with managing Platte River's risks and approving the *Risk Management Plan*. The *Risk Management Plan* is a summary of Platte River's proactive efforts to identify, evaluate, rank, and mitigate risks significant to Platte River which could negatively impact electric supply, finances, reputation, and safety requirements. In a bottom-up approach, Platte River's risk management process provides the framework to identify and assess specific risks by soliciting subject matter experts input and developing mitigation strategies.

Since the first iteration of the *Risk Management Plan* in

2004, Platte River has assessed risks on a five-year planning horizon. Beginning in 2015, the *Risk Management Plan* will transition to a ten-year planning horizon. This transition will better capture risks associated with resource planning, the impacts of proposed carbon legislation, and will be consistent with Platte River's strategic planning horizon.

Additionally, the *2015 Annual Budget* includes funds for a third party review of the *Risk Management Plan* and risk mitigation activities. It is anticipated that a Request for Proposals (RFP) will be issued in the spring of 2015. The third party review will include, but not be limited to, a thorough review of Platte River's risk ranking methodology and metrics, risk assessment development and review processes, and business risk best practices. A detailed report will be provided by the third-party summarizing the assessment, Platte River strengths and weaknesses, and recommendations.



# FINANCIAL MANAGEMENT

Historically, Platte River developed a stand-alone *Strategic Financial Plan (SFP)*. Beginning in 2013, the *SFP*, which includes detailed financial policies and targets, is included as Appendix C.

Platte River’s *SFP* is designed to provide long-term financial stability by generating adequate cash flows, maintaining access to low cost capital, providing stable and competitive wholesale rates, and effectively managing financial risk. The board of directors reviews the *SFP* policies, goals, and financial projections at least annually.

Many of the *SFP* goals establish targets used in setting municipal wholesale rates. The *SFP* is designed with the intent of maintaining Platte River’s current AA senior lien debt credit rating by all three rating agencies: Fitch Ratings (AA), Moody’s Rating Service (Aa2), and Standard & Poor’s Rating Service (AA).

The *SFP* policies and goals are interrelated. By achieving the minimum target debt service coverage, the net income target, and the minimum days unrestricted cash on hand, Platte River should generate adequate cash flows to meet liquidity targets, exceed its debt to

capitalization goal, and maintain access to low cost capital.

Maintaining the minimum unrestricted days cash on hand ensures a strong cash position, significantly enhancing future operating and financing flexibility. The Rate Stabilization Fund goals are met if an unforeseen event were to occur, such as an extended unplanned Rawhide outage.

The remaining financial goals focus on providing competitive wholesale rates to the municipalities, prudently investing capital, and establishing appropriate and cost effective programs to manage Platte River’s risk against catastrophic losses.

## FINANCIAL PROJECTIONS

Ten-year projections of rate changes over time, capital plans and other financial metrics will be developed in conjunction with the new *IRP* and will be incorporated into the *2016-2026 Strategic Plan*.



# LEGISLATIVE AND REGULATORY

Platte River's legislative and regulatory efforts at both the state and federal level support the mission of providing safe, reliable, and competitively priced energy and services while simultaneously recognizing and mitigating the environmental impacts of power generation.

Platte River strives to maintain positive relationships with members of Colorado's congressional delegation, the governor's office, the Colorado General Assembly, as well as with state and federal regulators. In addition to direct issue-related communication with governmental decision makers, Platte River is an active participant in trade associations, such as the American Public Power Association (APPA), the Large Public Power Council (LPPC), and



the Colorado Association of Municipal Utilities (CAMU). These associations offer a cost effective means to participate in legislative and regulatory proceedings. Platte River management staff actively participates in these organizations to ensure that our positions are adequately reflected by these organizations.

Platte River utilizes the *Strategic Plan* to set forth policies and principles to provide direction for management and staff. Appendix D provides a summary of pending issues and positions. Also included in Appendix D are specific environmental policy and principles that provide guidance to Platte River management and staff.

# MUNICIPAL PLANNING

A brief summary of current planning activities within the municipalities is provided on the following pages based on input provided by each of the municipalities.



## TOWN OF ESTES PARK

- The town is cost sensitive, having higher costs relative to large municipalities. Rates are still lower than regional investor owned or rural electric utilities. Cost consciousness will impact future planning.
- Significant environmental advocacy exists within the town and there is interest in providing information regarding cost impacts of renewable energy or other environmental initiatives.
- The current focus is toward capital investment. Other areas of focus include cost management, identifying risks/opportunities, and prioritization.
- Some key initiatives currently underway or being considered include economic development, land use, and water/energy planning – part of an overall planning process.

# MUNICIPAL PLANNING CONTINUED



## CITY OF FORT COLLINS

- The *City Plan* has been developed as a comprehensive overall city planning document. This includes a set of principles along with policies to consider key initiatives for the next 25 years of city planning. The past round of updating the *City Plan* was the first time utilities were integral to the development of the *plan*. Items include codes for energy efficiency, transportation (electrification), demand response, smart grid development, safety and security, reliability, and other items.
- The *Energy Policy* sets metrics for reliability, efficiency (1.5 percent of load year after year – goals met for the first time this year on a gross basis), demand reduction (5 percent by 2015 and 10 percent by 2020), renewable energy (meet RES), and encouragement to coordinate closely with Platte River on resource planning and other issues. The *Energy Policy* is currently being reviewed and will be updated in 2015
- *Utilities for the 21st Century* – A plan specifically for the Utilities Department that seeks ways to sustain the utility for the long term (50 years +). The plan includes workforce planning, triple bottom line evaluation of alternatives (economic, social, and environmental), and a stakeholder initiative (to better communicate with customers and other stakeholders). The next iteration of strategic planning for *Utilities for the 21st Century* kicked off this year and will be completed in 2015. This is a broader planning effort incorporating all aspects of utilities operations.
- *2009 IT Strategic Road Map* – A 10-year plan for IT development. This initiative ties to the utilities smart grid efforts and other work involving information technologies. The *IT Strategic Plan* was updated in 2013 to account for the work that has been accomplished and to look forward for the next ten years.
- *Climate Action Plan* – The City Council approved plan includes carbon reduction goals (20 percent below 2005 by 2020, 80 percent by 2050). This plan is also being reviewed and updated this year.
- Other plans include a *Transportation Master Plan*, *Green Building Plan*, and *Road to Zero Waste Plan*.
- In 2015, the city will begin to study the best approach for facilitating the implementation of high speed broadband in the community. A strategic examination of potential models, a feasibility and business case review of the most likely structures, and development of an action plan to move forward will begin in 2015.

# MUNICIPAL PLANNING CONTINUED



## CITY OF LONGMONT

- Focus on Longmont* - This plan sets direction at a city level and is included in the city's annual budget process. Five key categories/initiatives with general goals are included (healthy business climate, education, enhance the natural environment, revitalize downtown, and community identity). Longmont Power & Communications (LPC) has a tie to "healthy business climate" (low rates as an economic driver), "enhance the natural environment" (energy efficiency programs, energy mix, etc.), and other areas (reliability, customer satisfaction). LPC provides related reporting statistics – definitive goals are not included as a part of this plan.
- Comprehensive Plan* - Longmont utilizes the city's *Comprehensive Plan* to identify long range capacity requirements. The plan provides a model for staff to predict average loads based on specific densities and land development types. LPC's planning strategy includes distribution and substation needs for the complete build out of the community. As the *Comprehensive Plan* is modified LPC reviews and updates planning strategies accordingly.
- Broadband Services* - LPC has offered limited pilot services during 2013 and 2014, and additionally now provides 10 Gig services to the local school district. Large scale residential and commercial network construction began the summer of 2014; and as of November 2014 LPC is providing high-speed internet and digital voice services on their 100 percent fiber to the premise network in the initial build-out area. Branded *NextLight*, these services are available to customers as phases are installed across the city, with a planned three year build-out.

# MUNICIPAL PLANNING CONTINUED



## CITY OF LOVELAND

- The Utility Commission provides direction to management/staff and is engaged in planning efforts. City Council conducts an annual retreat for planning purposes.
- The city manager has set initiatives in the areas of improved communication/coordination of city direction, conducting meetings with the management team (expanding to mid-management).
- Loveland has a general fund plan for setting financial priorities.
- Loveland will begin to develop a strategic plan for the water, wastewater, and power utilities in 2015.
- A sustainability plan is being developed. The Public Works Department is leading this effort with support from the Water and Power Department.
- Loveland plans to develop an Energy Policy by 2017.
- City Council is currently updating the 2005 *Comprehensive Plan*, which serves as a guide for aspects of Loveland’s planning. The goal is to have this completed by 2015. It provides mission/vision statements and is mostly focused on land use planning. From a utility perspective, it includes water conservation through land use, efficient utility service through higher density planning, coordination of the utility needs to support downtown redevelopment, and undergrounding power lines.
- Loveland adopted an *Economic Development Strategic Plan* and *Incentive Policy* in February 2012.
- Key planning items for Loveland include cost control, demand side management, demand response, renewable supply integration, new rate design implementation for large customers, economic development, energy efficiency programs, workforce planning, leveraging new technologies, public outreach, and addressing aging infrastructure.

# APPENDICES



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# 2015 OFFICIAL LOAD FORECAST



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# 2015 OFFICIAL LOAD FORECAST CONTINUED

APPENDIX A

## NERC REQUIREMENTS

This document serves as Platte River Power Authority's *Official Load Forecast*. Upon completion, the planning coordinator—the responsible entity that coordinates and integrates transmission facility and service plans, resource plans, and protection systems—will be notified. Additionally, the load serving entity, which secures energy and transmission service (and related interconnection

operations services) to serve the electrical demand and energy requirement of the end-use customers, is also notified. The demand data contained herein does not include any nonmember entities.

## FORECAST METHODOLOGY

Platte River uses an econometric model to develop long-term energy forecasts and five-year average monthly load factors to develop demand forecasts. Econometric modeling uses multiple forecasts of independent variables, along with historical values for these variables to project the future growth of a dependent variable. Platte River's econometric model uses independent variable projections including population, employment, and weather to project demand and energy growth in the owner municipalities. Demand and energy for each month are projected independently over the ten-year horizon beginning in 2015, and extending through 2024.

Population and employment forecasts were provided by Woods & Poole (W&P), an independent, economic forecasting firm. W&P's employment and population forecasts for Larimer County continue to decline from historical growth rates. While Platte River's municipalities' populations grew at an annual average rate of 2.4 percent between 1991 and 2013; more recently, from 2009 to 2013, the population growth has decreased to an average annual rate of 1.5 percent. W&P projects an average annual population growth of 2.3 percent over the next ten years. Historical population data for the four municipalities is provided by the Colorado State Demography Office, a division of the Department of Local Affairs.

The future independent weather variables used are assumed to be for typical weather conditions; therefore the average conditions, beginning 2004 through present, were applied. Weather variability in any given year may be higher or lower than the historical average. Weather data incorporated into the model is supplied by Day Weather, Inc., which provides daily meteorological data specific to the City of Fort Collins. This weather data is deemed representative of the majority of Platte River's system. Energy forecasts are based on monthly cooling degree days (CDD) values for summer and heating degree days

(HDD) values for winter. CDD and HDD were selected as the independent weather variables based on past recommendations by Utility Financial Solutions, a consulting firm that assisted with the development of the econometric model and past *Official Load Forecasts*.

## 2015 FORECAST ADJUSTMENTS

During 2014, Platte River experienced system loads below both the previous year's consumption and forecasted loads. While cooler than average weather during the duration of the summer contributed significantly to the lack of load growth, monthly deviations may be attributed to multiple factors: weather variations from historical trends, demand side management programs in the municipalities, and the continued economic recovery among other factors. After many years of strong growth, the recession caused loads in 2009 and 2010 to decrease significantly relative to 2008. As loads began to recover with the economy, Platte River experienced a new system peak in 2011. Once again in 2012, the all-time system peak was exceeded, with similar peaks in June and July. Despite not achieving another record annual peak, 2013 experienced continued load growth. Although economic variables are incorporated into the econometric model, these variables, combined with historical loads, caused the model to project 2015 loads higher than would be predicted using only recent trends. This effect, combined with the suppressed loads experienced in 2014, resulted in a modification of the forecasting methodology. In order to reflect current economic conditions, load projections more consistent with recent system performance and econometric projections were combined to forecast 2015 demand and energy. For 2016 and beyond, the escalation rates generated by the econometric model were used to forecast system growth.

# 2015 OFFICIAL LOAD FORECAST CONTINUED

## DEMAND SIDE MANAGEMENT

As DSM programs continue to evolve and grow, their impacts upon Platte River's municipalities' loads have also grown. DSM includes common programs, which are funded and operated by Platte River, and offered to all the municipalities. These common programs are focused on energy efficiency and do not include direct control load management as defined by NERC. In addition to common programs, each

municipality funds and operates DSM programs specific to their communities (referred to as municipal programs). Staffs from Platte River and the municipalities have been working collaboratively to aggregate effects of DSM programs into system forecast planning—particularly those programs for which energy and demand savings have been tracked, evaluated, measured, and verified.

## DIRECT CONTROL LOAD MANAGEMENT

Direct control load management (DCLM) is DSM that is under direct control of a system operator. DCLM does not include interruptible load. While Platte River currently has no DCLM forecasted for the ten-year planning horizon,

collaborative efforts with the municipalities will continue exploring opportunities for coordinated demand response (DR) programs.

## FORECAST DESCRIPTIONS

During the development of the Official Load Forecast, various scenarios are considered, producing multiple forecast results. Platte River uses four forecasts for planning and analysis purposes:

- Foundation Forecast
- Base Forecast
- Low Growth Forecast
- High Growth Forecast

All forecasts incorporate identical weather variables mentioned earlier in the "Forecast Methodology" section. Historical population and load data also remains the same in all cases.

### FOUNDATION FORECAST

The Foundation Forecast is the first forecast generated and is used to create the Base forecast described below. Along with the standard independent variables mentioned above, this case incorporates the population growth rates provided by W&P, a 2.3 percent average growth rate from 2015 through 2024.

### BASE FORECAST

The base forecast receives the primary focus and serves as Platte River's official forecast in base modeling scenarios used in rate setting and financial planning. Forecasted DSM savings for common programs, measured and verified by Platte River, are subtracted from the foundation forecast to produce the base forecast.

### LOW GROWTH FORECAST

Along with the standard independent variables mentioned above, this case incorporates lower population growth rates than projected by W&P. A 1.0 percent annual population growth rate is used from 2015 through 2024. The low growth scenario includes DSM savings estimates for both common programs and municipal programs. DSM savings are subtracted from the resulting forecast to produce the low growth forecast.

### HIGH GROWTH FORECAST

The high growth forecast case includes the same independent variables as the base and low growth cases but incorporates higher population and employment growth rates than the W&P projections. The higher growth rates equal the maximum ten-year average annual growth rates occurring between 1991 and 2013. A 3.5 percent annual population growth rate and a 4.7 percent annual employment growth rate are used from 2015 through 2024. DSM savings from common programs are also subtracted to produce the final high growth forecast. The annual peak demand produced by the high growth forecast—assumed to occur in July—additionally serves as the transmission planning forecast.

# 2015 OFFICIAL LOAD FORECAST CONTINUED APPENDIX A

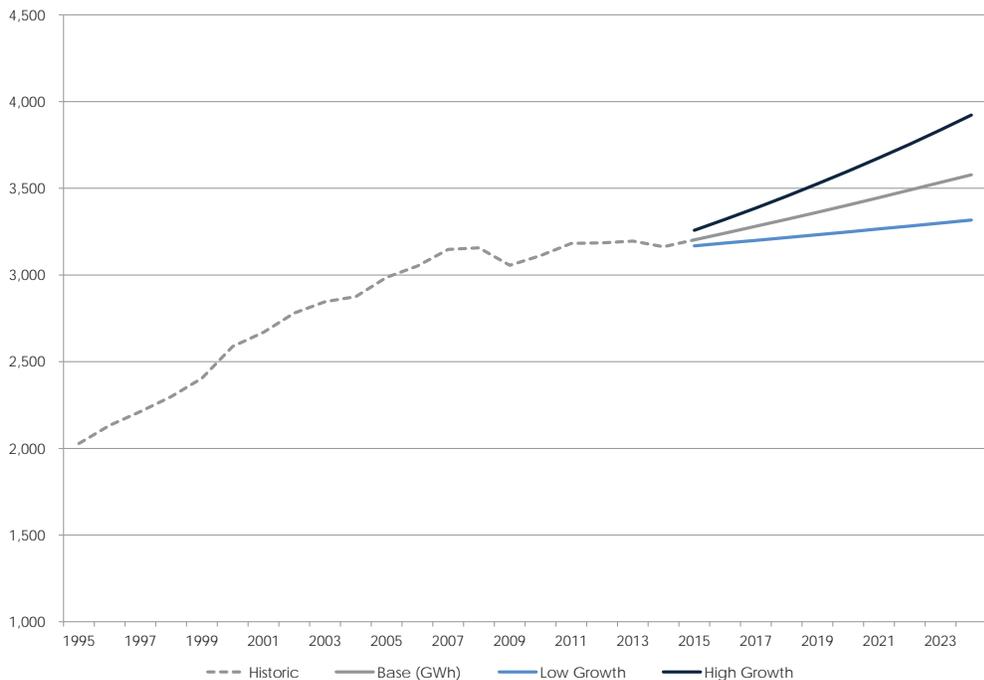
## 2015 FORECAST SUMMARIES

The 2015 Official Load Forecast base case projects energy consumption in 2015 to increase 1.3 percent relative to 2014. An annual average growth rate of 1.2 percent is projected for energy consumption over the course of the ten year forecasting horizon. The high growth scenario projects 2.1 percent average annual growth from 2015 through 2024, while 0.5 percent average annual growth is projected over the same timeframe in the low growth scenario.

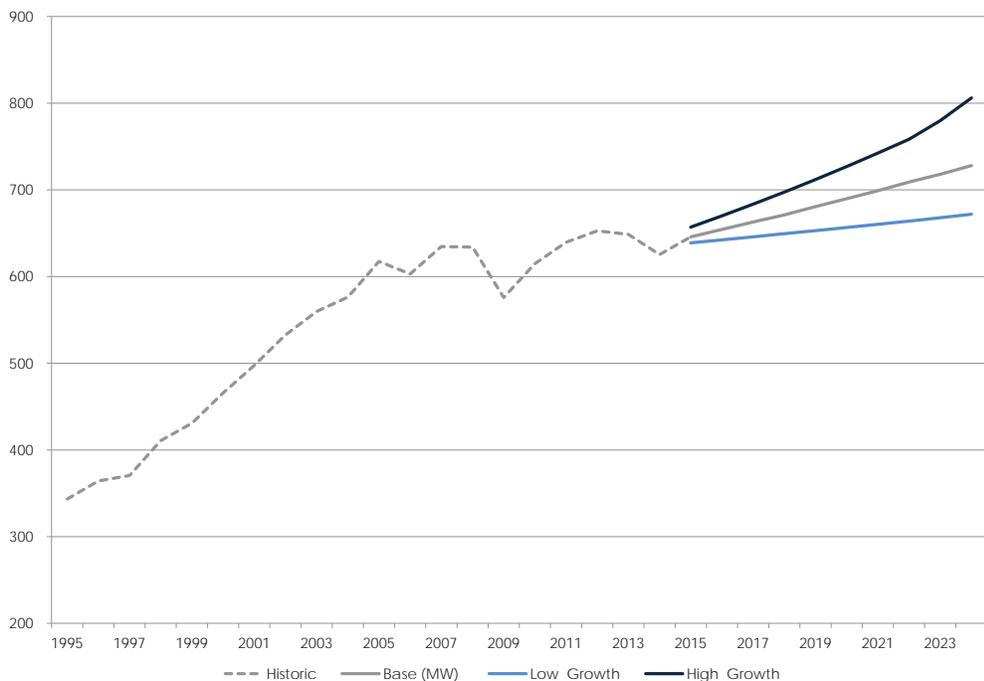
Growth of total billable peaks in the base case is commensurate with energy growth. Billable peaks in 2015 are anticipated to increase 1.0 percent over 2014 levels, with 1.2 percent average annual growth projected from 2015 through 2024. Total billable peaks in the high growth scenario increase at an average projected rate of 2.1 percent from 2015 through 2024. The low growth scenario projects 0.5 percent average annual growth for annual peaks.

The peak demand in 2015 is projected in the base case to increase by 3.2 percent over the 2014 peak demand. Below average weather conditions during 2014 resulted in a lower than projected peak demand. Normal weather conditions are assumed in 2015 for the base case, resulting in a higher one year growth rate. Peak demand is forecasted to grow at an average rate of 1.3 percent from 2015 through 2024 in the base case. The high growth case projects 2.3 percent annual average increases for peak demand during the ten-year horizon, while peak demand increases 0.6 percent annually in the low growth case.

Annual Energy (GWh)



Annual Peak (MW)



# 2015 OFFICIAL LOAD FORECAST CONTINUED

The following table summarizes the four forecast scenarios: base case, low growth, high growth, and transmission planning.

Year	ANNUAL ENERGY			BILLABLE PEAKS			PEAK DEMAND		
	Base (GWh)	Low Growth	High Growth	Base (MW)	Low Growth	High Growth	Base (MW)	Low Growth	High Growth**
2015	3,202	3,168	3,258	6,108	6,043	6,211	646	639	657
2016	3,241	3,184	3,321	6,183	6,073	6,333	654	642	670
2017	3,281	3,200	3,387	6,259	6,104	6,459	663	646	684
2018	3,321	3,216	3,455	6,335	6,135	6,590	671	649	697
2019	3,362	3,232	3,526	6,415	6,166	6,726	681	653	712
2020	3,404	3,249	3,599	6,495	6,198	6,867	690	657	727
2021	3,446	3,266	3,675	6,577	6,230	7,014	699	660	742
2022	3,490	3,282	3,754	6,660	6,262	7,166	709	664	758
2023	3,534	3,299	3,837	6,744	6,295	7,324	718	668	780
2024	3,578	3,317	3,922	6,830	6,328	7,488	728	672	806

\*\* The High Growth Peak Demand Forecast serves as the Transmission Planning Forecast

## RENEWABLE ENERGY FORECAST

Prior to 2014, all non-hydro renewable energy supply to the municipalities was provided through Tariff 7. Recently, new wind sources have been acquired in response to the Strategic Plan initiative related to diversifying the resource mix. These resources have been included in service provided through Tariff 1. Over the long-term, the forecast for renewable energy will be driven by:

- Municipality requests for service under Tariff 7;
- Operating performance of existing resources; and
- Direction provided by the next IRP.

The following table provides a ten-year forecast of estimated supply from renewable resources that currently exist or are under contract. No additional renewable supplies are included at this time. This forecast will be updated upon completion of the next IRP.

WHOLESALE NON-HYDRO RENEWABLE ENERGY FORECAST (GWh)										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
Tariff 7 Requests	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6	105.6
Tariffs 7 Resources	111.6	106.6	106.6	106.6	106.6	106.6	106.6	106.6	106.6	106.6
Tariff 1 Resources	239.9	239.9	239.9	239.9	239.9	239.9	239.9	239.9	239.9	239.9
<b>Total Renewable Resources</b>	<b>351.5</b>	<b>346.5</b>								
<b>Total Renewable Portion of Municipal Supply</b>	<b>11.0%</b>	<b>10.7%</b>	<b>10.6%</b>	<b>10.4%</b>	<b>10.3%</b>	<b>10.2%</b>	<b>10.1%</b>	<b>9.9%</b>	<b>9.8%</b>	<b>9.7%</b>

\* Surplus in a given year is available for use in the Existing Resources for the next year, consistent with common renewable program practices.

As indicated above, Tariff 7 renewable supply is anticipated to meet Tariff 7 requests through the planning period. Non-hydro renewable supply is expected to represent between 9.7 percent and 11.0 percent of total energy supplied to the municipalities during this period.

# 2015 OFFICIAL LOAD FORECAST CONTINUED

APPENDIX A

## LOAD AND RESOURCES SUMMARY

Based on Platte River's current (base) ten-year load forecast, the following are updated peak month loads and resource tables. The first table shows loads and resources with all sources available and the second table provides information on loads and resources with Platte River's largest generation source (Rawhide coal unit) out of service. According to the 2012 IRP's criteria, the need for additional capacity will occur beyond the Official Load Forecast's ten-year horizon.

PEAK MONTH FORECAST - (MW)										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Loads</b>										
Foundation Forecast	648	659	670	681	693	705	717	729	741	754
DSM <sup>(1)</sup>	(2)	(5)	(7)	(10)	(12)	(15)	(18)	(20)	(23)	(26)
Municipal Loads (Base)	646	654	663	671	681	690	699	709	718	728
Capacity Sale	-	-	-	-	-	-	-	-	-	-
Losses	12	12	12	12	12	12	13	13	13	13
<b>Total Loads</b>	<b>658</b>	<b>666</b>	<b>675</b>	<b>683</b>	<b>693</b>	<b>702</b>	<b>711</b>	<b>722</b>	<b>731</b>	<b>741</b>
<b>Resources</b>										
Rawhide	280	280	280	280	280	280	280	280	280	280
Craig	154	154	154	154	154	154	154	154	154	154
CRSP	60	60	60	60	60	60	60	60	60	60
LAP	30	30	30	30	30	30	30	30	30	30
Wind ELCC	10	10	10	10	10	10	10	10	10	10
Peaking	388	388	388	388	388	388	388	388	388	388
<b>Total Resources</b>	<b>922</b>									
Surplus (Deficit)	264	256	247	239	229	220	211	200	191	181
Reserve Margin <sup>(2)</sup>	40.2%	38.4%	36.6%	34.9%	33.1%	31.3%	29.6%	27.8%	26.1%	24.5%

<sup>(1)</sup> DSM based on Common Programs measured and verified by Platte River.

<sup>(2)</sup> Reserve margin calculation excludes surplus sales and required reserves.

RAWHIDE OUT OF SERVICE - PEAK MONTH FORECAST (MW)										
	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
<b>Loads</b>										
Foundation Forecast	648	659	670	681	693	705	717	729	741	754
DSM <sup>(1)</sup>	(2)	(5)	(7)	(10)	(12)	(15)	(18)	(20)	(23)	(30)
Municipal Loads (Base)	646	654	663	671	681	690	699	709	718	724
Capacity Sale	-	-	-	-	-	-	-	-	-	-
Losses	12	12	12	12	12	12	13	13	13	13
<b>Total Loads</b>	<b>658</b>	<b>666</b>	<b>675</b>	<b>683</b>	<b>693</b>	<b>702</b>	<b>711</b>	<b>722</b>	<b>731</b>	<b>737</b>
<b>Resources</b>										
Rawhide	-	-	-	-	-	-	-	-	-	-
Shaft Sharing	100	100	100	100	100	100	100	100	100	100
Craig	154	154	154	154	154	154	154	154	154	154
CRSP	60	60	60	60	60	60	60	60	60	60
LAP	30	30	30	30	30	30	30	30	30	30
Wind ELCC	10	10	10	10	10	10	10	10	10	10
Peaking	388	388	388	388	388	388	388	388	388	388
WRP	46	46	46	46	46	46	46	46	46	46
<b>Total Resources</b>	<b>788</b>									
Surplus (Deficit)	130	122	113	105	95	86	77	66	57	51

<sup>(1)</sup> DSM based on Common Programs measured and verified by Platte River.

# 2015 OFFICIAL LOAD FORECAST CONTINUED

APPENDIX A

## HISTORICAL AND FORECASTED ENERGY

ENERGY (GWh) - BASE FORECAST													
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Annual Energy
1995	176	155	166	159	161	162	177	189	166	167	169	182	2,028
1996	189	172	178	164	168	173	191	187	169	176	175	191	2,133
1997	195	171	178	174	173	179	198	193	181	183	185	201	2,213
1998	196	175	189	176	179	184	212	207	194	188	186	210	2,298
1999	205	181	195	188	189	196	226	220	193	198	197	216	2,404
2000	214	197	204	191	204	211	246	244	214	209	219	233	2,587
2001	229	207	216	201	210	224	258	249	216	215	214	233	2,670
2002	235	211	227	209	215	242	276	250	223	226	225	242	2,781
2003	237	219	226	212	225	223	290	277	226	230	231	250	2,846
2004	247	231	231	220	233	232	266	257	234	230	237	257	2,875
2005	254	224	240	224	237	250	298	273	245	237	238	268	2,986
2006	251	235	248	226	244	274	299	287	234	243	244	269	3,052
2007	278	242	245	235	242	264	315	307	251	246	245	278	3,147
2008	279	249	254	240	248	260	313	290	246	250	246	281	3,157
2009	269	234	247	237	241	246	283	277	248	249	244	282	3,056
2010	271	242	249	231	239	266	298	296	252	245	252	271	3,112
2011	275	250	251	236	243	261	315	317	252	250	253	281	3,182
2012	267	253	247	234	247	295	321	302	254	242	248	275	3,185
2013	276	245	256	243	248	278	303	304	262	250	248	282	3,196
2014	275	251	254	237	248	259	299	288	264	249	254	283	3,163
2015	278	251	254	239	246	276	312	305	258	251	251	282	3,202
2016	282	255	256	242	248	280	316	308	261	254	253	285	3,241
2017	286	259	259	245	250	284	320	312	265	258	256	289	3,281
2018	290	263	262	247	252	288	324	316	268	262	258	292	3,321
2019	294	267	265	250	254	293	329	319	271	266	260	295	3,362
2020	298	271	268	253	256	297	333	323	275	270	263	299	3,404
2021	302	275	271	256	258	302	338	327	278	274	265	302	3,446
2022	306	279	274	258	260	307	342	331	282	278	268	306	3,490
2023	311	283	277	261	262	311	347	335	285	282	270	309	3,534
2024	332	302	294	278	278	333	370	357	304	302	287	329	3,767

\* For 2014, September - December energy reflect 2014 Budget figures

# 2015 OFFICIAL LOAD FORECAST CONTINUED

APPENDIX A

## HISTORICAL AND FORECASTED DEMAND

DEMAND (MW) - BASE FORECAST														
Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Peak	Billable Peaks
1995	314	310	307	278	266	305	341	343	333	294	319	325	343	3,737
1996	341	335	316	293	314	333	346	346	331	309	316	364	364	3,945
1997	355	328	319	312	295	355	371	360	341	316	340	361	371	4,054
1998	350	331	322	319	325	381	411	392	385	329	346	392	411	4,282
1999	358	347	331	326	319	388	431	418	371	340	361	386	431	4,376
2000	366	364	357	327	399	437	460	466	435	359	385	429	466	4,783
2001	395	400	363	348	370	465	496	497	456	380	407	417	497	4,994
2002	400	411	394	383	442	510	533	504	475	412	403	427	533	5,294
2003	426	430	416	367	467	465	560	555	461	406	410	452	560	5,415
2004	452	431	400	373	441	520	576	524	458	384	443	453	576	5,456
2005	459	428	402	386	476	537	618	550	503	407	447	497	618	5,712
2006	435	458	429	392	462	603	591	590	445	418	473	467	603	5,762
2007	478	478	442	396	425	611	635	614	529	410	446	482	635	5,946
2008	487	460	435	400	459	551	614	634	483	419	450	518	634	5,909
2009	490	434	410	404	474	536	576	559	499	432	436	512	576	5,763
2010	486	454	414	389	470	575	615	595	487	422	476	468	615	5,850
2011	487	513	450	388	405	573	639	612	586	455	440	505	639	6,054
2012	464	451	428	418	464	653	651	612	547	423	451	479	653	6,041
2013	481	448	438	429	460	639	649	624	618	423	458	505	649	6,171
2014	479	511	445	399	490	545	626	591	565	433	461	505	626	6,050
2015	488	483	439	409	458	604	646	619	569	437	456	501	646	6,108
2016	495	490	443	413	461	613	654	627	576	443	460	507	654	6,183
2017	502	497	448	418	465	622	663	634	583	449	464	512	663	6,259
2018	509	505	453	423	468	632	671	642	591	456	468	518	671	6,335
2019	516	512	458	427	472	641	681	649	598	463	473	524	681	6,415
2020	524	520	463	432	476	651	690	657	605	470	477	530	690	6,495
2021	531	528	468	437	480	661	699	665	613	477	481	536	699	6,577
2022	539	536	473	442	483	672	709	673	621	484	486	543	709	6,660
2023	546	544	478	447	487	682	718	681	629	492	490	549	718	6,744
2024	554	552	484	452	491	693	728	690	637	499	495	555	728	6,830

\* For 2014, September - December demand reflect 2014 Budget figures

# RISK MANAGEMENT PLAN

APPENDIX B

Gas Price Volatility



The *Risk Management Plan* is a summary of Platte River's proactive efforts to identify, evaluate, rank, and mitigate risks significant to Platte River which could negatively impact electric supply, finances, reputation, and safety requirements. The *Risk Management Plan* is included in Platte River's *Strategic Plan* summarizing identified risks and risk mitigation strategies. Platte River's risk management process provides the framework to identify and assess specific risks by soliciting staff input and following an assessment and documentation process.

Identified risks are evaluated through a risk assessment process coordinated by the chief financial and risk officer, financial planning staff, and a Risk Oversight Committee (ROC) consisting of the general manager and senior management. The ROC identifies subject matter experts throughout Platte River to provide expertise and information regarding each identified risk and to alert the ROC of additional risks. As risks are identified, Platte River data, industry data, staff and management experience, and evaluation tools are utilized as a component of a detailed review process to assess the magnitude and probability. Magnitude and probability ranks are assigned by the ROC based on specific criteria (see Risk Definitions, Table 1 and Table 2); higher rated risks are prioritized for the development and implementation of mitigation strategies when possible.

Mitigation strategies include, but are not limited to insurance coverage, financial and physical contracts, operational business practices, and monitoring processes.

All identified risks and the effectiveness of mitigation strategies are reassessed by the ROC on a regular basis and prioritized for action, if warranted. Assessment documentation and supporting analysis is maintained by financial planning staff and reviewed by the ROC.

All identified risks are listed in Table 3, the Risk Inventory. Risks included in the Risk Inventory, assessments, and supporting documentation, are approved by the chief financial and risk officer.

Since the first iteration of the *Risk Management Plan* in 2004, Platte River has assessed risks on a five-year planning horizon. Beginning in 2015, the *Risk Management Plan* will transition to a ten-year planning horizon. The longer planning horizon will better capture risks associated with resource planning, the impacts of proposed carbon legislation, and will be consistent with Platte River's strategic planning horizon.

Additionally, the *2015 Annual Budget* includes funds for a third party review of the *Risk Management Plan* and risk mitigation activities. It is anticipated that an RFP will be issued in the spring of 2015. The third party review will include, but not be limited to, a thorough review of Platte River's risk ranking methodology and metrics, risk assessment development and review processes, and business risk best practices. A detailed report will be provided by the third-party summarizing the assessment, Platte River strengths and weaknesses, and recommendations.

# RISK MANAGEMENT PLAN CONTINUED

## RISK DEFINITIONS

Platte River’s identified risks are analyzed and assigned a magnitude and probability classification as defined in Table 1 and Table 2 respectively.

TABLE 1: Magnitude

MAGNITUDE RANK	ELECTRIC SUPPLY	SAFETY	FINANCIAL	REPUTATION AND INTERESTS
HIGH	Loss of supply to an entire city	Loss of life or serious bodily injury	Significant impact >\$10 million	Significant long-term damage
MEDIUM	Loss of supply to part of a city	Bodily injury	Limited impact \$5 - \$10 million	Short-term damage
LOW	Momentary loss to a city substation	No injury	Modest impact <\$5 million	No appreciable damage

TABLE 2: Probability

PROBABILITY RANK	PROBABILITY RANK DEFINITION
HIGH	The identified risk is likely to occur within five years.
MEDIUM	The identified risk could occur within five years and should be anticipated.
LOW	The identified risk is unlikely to occur within five years.

<b>IDENTIFIED RISK</b>	Risks identified as significant to Platte River which could negatively impact electric supply, finances, reputation, and safety requirements.
<b>MAGNITUDE</b>	The impact of an identified risk occurring. Ranking classifications are detailed in Table 1.
<b>PROBABILITY</b>	The likelihood of an identified risk occurring within a specified time period. Ranking\classifications are detailed in Table 2.
<b>RISK OVERSIGHT COMMITTEE</b>	ROC; a committee consisting of the general manager and senior management, charged with managing Platte River’s risks and approving the <i>Risk Management Plan</i> .
<b>RISK MANAGEMENT PLAN</b>	A document included as an integral part of Platte River’s <i>Strategic Plan</i> summarizing Platte River’s identified risks and risk mitigation strategies.
<b>RISK INVENTORY</b>	A table within the <i>Risk Management Plan</i> that summarizes identified risks’ magnitude, probability, and risk mitigation strategies.

# RISK MANAGEMENT PLAN CONTINUED

APPENDIX B

## RISK & MITIGATION STRATEGIES

TABLE 3: Risk Inventory, Five-Year Planning Horizon

Identified Risks	Magnitude	Probability	Page No.
1. Defined Benefit Plan Investment Under-Performance	High	High	B-4
2. Increased Turnover of Employees (Knowledge Loss)	Medium	High	B-4
3. Damage by Outside Contractor Employees	High	Medium	B-4
4. New Mandated Emission Reductions	High	Medium	B-5
5. Mandated Renewable Energy Standard	Medium	Medium	B-5
6. Business Cyber Security System Intrusions	Medium	Medium	B-5
7. Coal Expense Volatility	Medium	Medium	B-5
8. Interest Rate Changes	Medium	Medium	B-6
9. Physical Security Systems Affecting Reliability or Human Life	Medium	Medium	B-6
10. Sustained Market Price Reductions (Wholesale Electricity)	Medium	Medium	B-6
11. Corporate Conduct	Medium	Medium	B-6
12. Employee Errors That Result in Loss of Electric Service	Medium	Medium	B-6
13. Credit Risk	High	Low	B-7
14. Cyber Security - Generation Combustion Turbines	High	Low	B-7
15. Cyber Security - Generation Unit 1 and Gas Yard Balance of Plant	High	Low	B-7
16. Cyber Security - System Operations	High	Low	B-7
17. Environmental Violations	High	Low	B-7
18. Extended Baseload Forced Outage: Rawhide	High	Low	B-8
19. Increases to Capital Expenditures	High	Low	B-8
20. Interruption of Coal Supply (Fuel and Rail, Trapper Mine)	High	Low	B-8
21. Interruption of Water Supply for Rawhide Generation	High	Low	B-9
22. Elimination of Tax Exempt Status of Newly Issued Power Revenue Bonds	Medium	Low	B-9
23. Financial Internal Controls	Medium	Low	B-9
24. Increased Regulation of Coal Combustion Residuals	Medium	Low	B-9
25. Interruption of Natural Gas Supply (Fuel and Pipe)	Medium	Low	B-10
26. Electric Facility Siting Constraints	Low	Medium	B-10
27. Extended Baseload Forced Outage: Craig	Low	Medium	B-10
28. FERC/NERC Regulatory Compliance Violation	Low	Medium	B-10
29. General Liability	Low	Medium	B-11
30. Increasing Natural Gas Price	Low	Medium	B-11

# RISK MANAGEMENT PLAN CONTINUED

## RISK & MITIGATION STRATEGIES

TABLE 3 - CONTINUED: Risk Inventory, Five-Year Planning Horizon

Identified Risks	Magnitude	Probability	Page No.
31. Increased Federal Oversight	Low	Medium	B-11
32. Increased State Oversight	Low	Low	B-11
33. Loss of Communication Systems (Phone, Fiber, Etc.)	Low	Low	B-12
34. Misalignment of Capacity Resources and System Loads	Low	Low	B-12
35. Physical Property Loss	Low	Low	B-12
36. Transmission Interruption	Low	Low	B-12
37. Wholesale Electric Market Manipulation	Low	Low	B-12

Mitigation strategies are discussed below for each identified risk. Each mitigation strategy requires the ROC's attention and follow-up to evaluate alternative courses of action.

### 1. DEFINED BENEFIT PLAN INVESTMENT UNDER-PERFORMANCE

**Magnitude:** High      **Probability:** High

**Mitigation:**

- The Defined Benefit Plan was closed for employees hired on or after September 1, 2010, and a Defined Contribution Plan was created for new employees.
- Reinstatement of the lump sum distribution option which reduces the risk of obtaining the Defined Benefit Plan's assumed rate of return on assets.

### 2. INCREASED TURNOVER OF EMPLOYEES (KNOWLEDGE LOSS)

**Magnitude:** Medium      **Probability:** High

**Mitigation:**

- Workforce development to build expanded knowledge base within the organization.
- Strengthening the recruiting and selection process.
- Organizational structure alignment to support cross training.
- Implementation of succession planning strategies.

### 3. DAMAGE BY OUTSIDE CONTRACTOR EMPLOYEES

**Magnitude:** High      **Probability:** Medium

**Mitigation:**

- Contractor qualifications are thoroughly evaluated during the selection process.
- Project managers provide oversight as work progresses. When appropriate, a surety bond or other form of financial security is obtained prior to the commencement of work.

# RISK MANAGEMENT PLAN CONTINUED

APPENDIX B

## 4. NEW MANDATED EMISSION REDUCTIONS

**Magnitude:** High                      **Probability:** Medium

**Mitigation:**

- Supply side mitigation options include reduced coal generation through scheduling changes capacity reductions or retirements, installation of combined-cycle gas turbine units, fuel switching (coal to gas), and increased use of renewable energy sources.
- Demand side mitigation options include increased energy efficiency, addition of distributed generation having relatively lower emission rates, combined heat and power applications (cogeneration and district heating), and fuel switching.
- Working with the municipalities, other emission reduction opportunities may be considered: transportation (e.g., electric vehicles), waste to energy applications, vegetation management, and new/innovative technology applications.
- Incorporate findings from the *2015 IRP*.

## 5. MANDATED RENEWABLE ENERGY STANDARD

**Magnitude:** Medium                      **Probability:** Medium

**Mitigation:**

- Evaluate costs and benefits of renewable energy in the context of risk associated with CO<sub>2</sub> charges. Integration of additional renewable resources may be prudent, particularly if renewable source costs decline.
- Staff will work with legislators to encourage respect of local control during the state legislative process and to educate elected officials on the steps taken by municipal utilities to diversify energy portfolios.
- Municipal utilities affected by the current renewable energy standards are allowed to create a renewable energy program substantially similar to the state mandate. Staff will work with the municipalities to implement the present mandates to position Platte River and the municipalities for the possibility of expanded mandates.

## 6. BUSINESS CYBER SECURITY SYSTEM INTRUSIONS

**Magnitude:** Medium                      **Probability:** Medium

**Mitigation:**

- Through the use of a third party expert, conduct regular vulnerability assessments and develop action plans to address identified security gaps.
- Develop standardized procedures for implementation and upgrading of desktops, software applications and hardware configuration.
- Monitor information provided by existing detection systems.

## 7. COAL EXPENSE VOLATILITY

**Magnitude:** Medium                      **Probability:** Medium

**Mitigation:**

- Continue to monitor coal markets for future opportunities to remove price volatility and fix forward pricing.

# RISK MANAGEMENT PLAN CONTINUED

APPENDIX B

## 8. INTEREST RATE CHANGES

**Magnitude:** Medium      **Probability:** Medium

**Mitigation:**

- Continue a laddered maturity investment strategy based on cash flow projections.
- Laddered maturities spread interest rate risk over time reducing interest rate volatility. Staff will analyze various debt options to help mitigate potential interest rate increases.

## 9. PHYSICAL SECURITY SYSTEMS AFFECTING RELIABILITY OR HUMAN LIFE

**Magnitude:** Medium      **Probability:** Medium

**Mitigation:**

- A Security Assessment Team was established to develop a security policy. The team identified security gaps and deficiencies, along with recommended industry best practices for solutions.
- Projects to enhance physical security are either progressing, in planning stages, or budgeted for future years.

## 10. SUSTAINED MARKET PRICE REDUCTIONS (WHOLESALE ELECTRICITY)

**Magnitude:** Medium      **Probability:** Medium

**Mitigation:**

- The Energy Risk Management Committee (ERMC) evaluates market prices and alternative sales arrangements to enhance surplus sale revenues.
- Continue negotiations with regional suppliers for medium term, day ahead and real time surplus energy sales.
- Continue sales strategies that optimize the use of lower cost baseload generation in the spring, fall, and winter and avoid contracted sales in the summer when margins are lower.

## 11. CORPORATE CONDUCT

**Magnitude:** Medium      **Probability:** Medium

**Mitigation:**

- Expand the ethics policy section of the *Employee Handbook*.
- Provide workforce training on ethics guidelines for public employees.
- Implement a compliance hotline for reporting potential violations.

## 12. EMPLOYEE ERRORS THAT RESULT IN LOSS OF ELECTRIC SERVICE

**Magnitude:** Medium      **Probability:** Medium

**Mitigation:**

- Job training focused on the acquisition and maintenance of skills through updating apprenticeship step progression requirements, regular refresher training on specialized processes or activities, and documenting processes.
- Building in time to review job hazards prior to beginning work will minimize the potential for errors.
- Standardization of safety procedures and practices.

# RISK MANAGEMENT PLAN CONTINUED

APPENDIX B

## 13. CREDIT RISK

**Magnitude:** High                      **Probability:** Low

**Mitigation:**

- Platte River diversifies its portfolio by purchasing different types of securities allowed under state statute: agency debt, treasury notes, investment pools, bank deposits and money market accounts. Within direct purchase agency debt, Platte River limits its exposure to each individual agency to less than 20 percent (subject to review by the chief financial and risk officer).
- Continue to maintain a diversified investment portfolio.
- Continue to monitor the Federal Housing Finance Agency reports to ensure the counterparties remain stable.

## 14. CYBER SECURITY – GENERATION COMBUSTION TURBINES

**Magnitude:** High                      **Probability:** Low

**Mitigation:**

- Multiple layers of cyber-security protection exist, along with built-in redundant, independent protections. These measures prevent total system failures and are independent of the turbine control system, therefore not subject to cyber security threats.
- The presence of five smaller independent generation units mitigates the impact versus possessing all peaking capacity on a single unit. Additionally, control of the combustion turbines is not completely dependent on network communication because each unit can be independently controlled locally at the machine.

## 15. CYBER SECURITY – GENERATION UNIT 1 AND GAS YARD BALANCE OF PLANT

**Magnitude:** High                      **Probability:** Low

**Mitigation:**

- Continue assessing security needs and implement the immediate and intermediate-term measures that have been identified.
- Strategies to further improve network security have been identified and will be implemented.

## 16. CYBER SECURITY – SYSTEM OPERATIONS

**Magnitude:** High                      **Probability:** Low

**Mitigation:**

- Continued process and internal controls improvement, capital investment, employee training, and proper staffing will provide the foundation and resources necessary to adapt to ever changing technologies, vulnerabilities, threats, and regulatory requirements specific to supervisory control and data acquisition (SCADA) systems.

## 17. ENVIRONMENTAL VIOLATIONS

**Magnitude:** High                      **Probability:** Low

**Mitigation:**

- Continue training staff to ensure environmental compliance. Training programs are enhanced as regulations and other requirements evolve.

# RISK MANAGEMENT PLAN CONTINUED

APPENDIX B

## 18. EXTENDED BASELOAD FORCED OUTAGE: RAWHIDE

**Magnitude:** High                      **Probability:** Low

**Mitigation:**

- Platte River has built excess capacity with the installation of five natural gas combustion turbines to not only meet peak summer demands, but to ensure electric supply during outages.
- The forced outage assistance agreement with Tri-State Generation and Transmission Association, Inc. which provides 100 MW of replacement power for up to one continuous week, lessens the exposure to purchase power and natural gas markets in the event of a Rawhide Unit 1 forced outage extension of this agreement and expanding similar agreements to other units will be evaluated.
- Continue excellent maintenance practices including, but not limited to, regular inspections, planned outages, and operating standards.
- Strategic planning efforts are underway to analyze and plan future capacity expansion plans. Planning tools will also provide additional metrics on loss of load to better evaluate outage risk.

## 19. INCREASES TO CAPITAL EXPENDITURES

**Magnitude:** High                      **Probability:** Low

**Mitigation:**

- Capital funds are budgeted annually.
- Capital expenditures are prioritized to cover higher risk projects.
- Budget contingency is available for capital expenditures not included in the budget.
- Standard accounting practices spreads the impact of capital expenditures over years of service.

## 20. INTERRUPTION OF COAL SUPPLY (FUEL AND RAIL, TRAPPER MINE)

**Magnitude:** High                      **Probability:** Low

**Mitigation:**

- Continue to seek long-term coal supply and rail contracts.
- Maintain strong relationships with coal and rail providers.
- Continue representation on the Trapper Mine Board of Directors, as well as the Fuel Buyers Team for Craig Station to guide and direct future fuel supply decisions.
- Continue Platte River representation through trade associations.
- Maintain a minimum of 60 days of stockpile inventory at Craig, and 75 days at Rawhide.

# RISK MANAGEMENT PLAN CONTINUED

APPENDIX B

## 21. INTERRUPTION OF WATER SUPPLY FOR RAWHIDE GENERATION

**Magnitude:** High      **Probability:** Low

**Mitigation:**

- Continue participation in the Windy Gap Firing Project.
- Research alternative water supplies needed for Rawhide coal unit operations.
- Evaluate water supply infrastructure, and research options for redundancy and/or maintenance and replacement opportunities.

## 22. ELIMINATION OF TAX EXEMPT STATUS OF NEWLY ISSUED POWER REVENUE BONDS

**Magnitude:** Medium      **Probability:** Low

**Mitigation:**

- Analyze various debt options which may be used in the event that tax exempt financing is eliminated.
- Continue to support the American Public Power Association and Large Public Power Council in their efforts to ensure the continuance of tax-exempt financing.

## 23. FINANCIAL INTERNAL CONTROLS

**Magnitude:** Medium      **Probability:** Low

**Mitigation:**

- The formation of the Internal Audit Committee prioritized the internal audit program.
- The committee reviews internal controls and processes, and verifies there is no management override of controls.

## 24. INCREASED REGULATION OF COAL COMBUSTION RESIDUALS

**Magnitude:** Medium      **Probability:** Low

**Mitigation:**

- Continue monitoring the federal Coal Combustion Residuals (CCR) rulemaking and participating through various trade associations.
- Continue participating in all stakeholder meetings and public process coordinated by Colorado Department of Public Health and Environment concerning state regulations affecting CCR management.
- Groundwater monitoring wells at Rawhide detect problems early, establish baseline conditions, and track natural variations.

# RISK MANAGEMENT PLAN CONTINUED

APPENDIX B

## 25. INTERRUPTION OF NATURAL GAS SUPPLY (FUEL AND PIPE)

**Magnitude:** Medium      **Probability:** Low

**Mitigation:**

- Continue regular inspection and maintenance of natural gas pipeline infrastructure, including the Colorado Interstate Gas (CIG) interconnects, to ensure reliability.
- Ensure scheduling staff is familiar with scheduling procedures on CIG's pipeline as an alternate source.
- Monitor potential alternative supply sources, including natural gas storage.
- Support expanded risk evaluation for potential new combined cycle gas generation.

## 26. ELECTRIC FACILITY SITING CONSTRAINTS

**Magnitude:** Low      **Probability:** Medium

**Mitigation:**

- Proper project planning and communication can mitigate environmental issues.

## 27. EXTENDED BASELOAD FORCED OUTAGE: CRAIG

**Magnitude:** Low      **Probability:** Medium

**Mitigation:**

- Platte River has built excess capacity with the installation of five natural gas combustion turbines not only to meet peak summer demands, but also to ensure electric supply during outages.
- Continue representation on the Yampa Engineering and Operating Committee and the Yampa Coordinating Committee to ensure/influence best business practices.
- Strategic Planning efforts are underway to analyze and plan future capacity expansion plans.

## 28. FERC/NERC REGULATORY COMPLIANCE VIOLATION

**Magnitude:** Low      **Probability:** Medium

**Mitigation:**

- Clear and ongoing communication from the General Manager that a culture of high ethics and reliability compliance is expected.
- Allocation of appropriate financial support, personnel, and resources.
- A well documented and widely disseminated Reliability Compliance Program is reviewed and modified.
- Manage and operate the internal Reliability Compliance Program independently of areas responsible for complying with Reliability Standards.
- Mandatory education and training for all relevant employees on compliance responsibilities and risks.
- Internal compliance monitoring processes.

# RISK MANAGEMENT PLAN CONTINUED

APPENDIX B

## 29. GENERAL LIABILITY

**Magnitude:** Low                      **Probability:** Medium

**Mitigation:**

- With the assistance of insurance brokers, appropriate insurance policies with adequate limits are maintained.
- Policy terms and limits to ensure appropriate coverage are regularly assessed.
- Clear and ongoing communication from the General Manager that a culture of high safety standards is expected.
- Continue to maintain industry recommended business policies and procedures.

## 30. INCREASED NATURAL GAS PRICE

**Magnitude:** Low                      **Probability:** Medium

**Mitigation:**

- In 2013, staff completed the necessary actions to become compliant with Commodity Futures Trading Commission (CFTC) regulations resulting from the Dodd-Frank Act. As a result, hedging activities have resumed in accordance with current hedging guidelines to mitigate upward price risk.
- The ERMC will continue to evaluate and enter natural gas hedging contracts for summer seasons to mitigate price risk volatility. The ERMC will also evaluate the effectiveness of, and update as necessary, natural gas hedging strategies.
- Continue regular updates of natural gas requirements and price projections.
- Reanalyze in the context of adding combined cycle gas generation in the future.

## 31. INCREASED FEDERAL OVERSIGHT

**Magnitude:** Low                      **Probability:** Medium

**Mitigation:**

- Continue to actively monitor changes to the legislative and regulatory landscape. Communicate Platte River's positions to legislators and regulators when necessary.
- Remain an active member of coalitions that monitor and participate in the legislative and regulatory process.

## 32. INCREASED STATE OVERSIGHT

**Magnitude:** Low                      **Probability:** Medium

**Mitigation:**

- Continue to actively monitor changes to the legislative and regulatory landscape. Communicate Platte River's positions to legislators and regulators when necessary.
- Remain an active member of coalitions that monitor and participate in the legislative and regulatory process.

# RISK MANAGEMENT PLAN CONTINUED

APPENDIX B

## 33. LOSS OF COMMUNICATION SYSTEMS (PHONE, FIBER, ETC.)

**Magnitude:** Low                      **Probability:** Low

**Mitigation:**

- Continue maintenance and operation of the redundant communication network and perform necessary upgrades to ensure reliability.

## 34. MISALIGNMENT OF CAPACITY RESOURCES AND SYSTEM LOADS

**Magnitude:** Low                      **Probability:** Low

**Mitigation:**

- The load forecast is updated annually to include recent load trends, energy efficiency efforts, weather conditions, and population and economic projections. The load forecast can be enhanced by including end-use forecasting.
- Continue active involvement in municipal energy efficiency and load management planning efforts.
- Strategic planning efforts are underway to analyze future capacity expansion plans. Planning tools will also provide additional metrics on loss of load probability and system constraints.
- Current tariff structure that allows costs of new large and unusual customer loads to be recovered.
- Capacity sales are reviewed by the ERM to ensure sales are maximized but not overextended to the degree native loads are jeopardized.

## 35. PHYSICAL PROPERTY LOSS

**Magnitude:** Low                      **Probability:** Low

**Mitigation:**

- Continue excellent maintenance standards to avoid mechanical failures and maintain training and education programs for safe operating procedures.
- As replacement costs continue to rise, conduct Maximum Foreseeable Loss (MFL) analysis annually as the MFL approaches the policy limit.

## 36. TRANSMISSION INTERRUPTION

**Magnitude:** Low                      **Probability:** Low

**Mitigation:**

- Review the *Emergency Plan* and consider maintaining inventory of temporary transmission equipment to bypass emergency out-of-service sections of the transmission system.
- Consider assisting owner municipalities in the risk evaluation of their distribution system.

## 37. WHOLESALE ELECTRIC MARKET MANIPULATION

**Magnitude:** Low                      **Probability:** Low

**Mitigation:**

- Continue bi-annual internal audits to ensure manipulative activity is not occurring.
- Continue annual staff training.

# STRATEGIC FINANCIAL PLAN

APPENDIX C

Platte River's *Strategic Financial Plan (SFP)* is designed to provide long-term financial stability by generating adequate cash flows, maintaining access to low cost capital, providing stable and competitive wholesale rates, and effectively managing financial risk. The board of directors reviews the *SFP* policies, goals, and financial projections at least annually.

## RATE REQUIREMENTS

Under Colorado law, Platte River's board of directors has the exclusive authority to establish electric rates. The Power Supply Agreements with the municipalities require the board to review rates at least once each calendar year.

The Power Supply Agreements with the municipalities and the General Power Bond Resolution contain specific provisions governing Platte River's rate setting. The Power Supply Agreements require that rates be sufficient to

cover all operating and maintenance expenses, purchase power costs, debt service expenses, and provide for the establishment of reasonable reserves and adequate earnings margins so that Platte River may obtain favorable debt financing. The General Power Bond Resolution requires that rates be sufficient to generate net revenues sufficient to cover debt service expense at a minimum 1.10 times.

## POLICIES AND GOALS

- Generate minimum debt service coverage of 1.50 times.
- Generate minimum net income equal to \$6 million.
- Target minimum 200 unrestricted days cash on hand.
- Maintain \$20 million in the Rate Stabilization Fund.
- Target debt to capitalization ratio less than 50 percent.
- Provide stable and competitive wholesale rates.
- Maintain access to low cost capital and favorable credit ratings.
- Maintain bond required reserves.
- Prudently manage and invest reserves.
- Variable rate debt managed in accordance with interest rate risk management policy.
- Manage financial risk.

# STRATEGIC FINANCIAL PLAN CONTINUED

The preceding policies and goals are interrelated. By achieving the minimum target for debt service coverage of 1.50 times, the net income target of \$6 million and the minimum 200 days unrestricted cash on hand, Platte River should generate adequate cash flows to meet liquidity targets, exceed its debt to capitalization goal, and maintain access to low-cost capital. Each policy and goal is discussed in more detail below.

## **GENERATE MINIMUM DEBT SERVICE COVERAGE OF 1.50 TIMES**

While the legal requirement for debt service coverage is 1.10 times, coverage at this level does not generate adequate cash flows, increases future debt issuance, and significantly impacts Platte River's credit rating; which increases the cost of future financings. Target debt service coverage of 1.50 times provides sufficient annual cash flows to partially fund future capital additions as well as maintain favorable credit ratings.

## **GENERATE MINIMUM NET INCOME OF \$6 MILLION**

Power Supply Agreements with the municipalities require Platte River to earn an adequate earnings margin to obtain revenue bond financing on favorable terms. A target minimum of \$6 million net income is a sufficient earnings margin to ensure cash balances are maintained, liquidity requirements are met, and financial flexibility remains available.

## **TARGET MINIMUM 200 DAYS UNRESTRICTED CASH ON HAND**

A minimum 200 days unrestricted cash on hand target ensures adequate cash is generated and maintained, thus ensuring Platte River's financial flexibility, strength, and liquidity. Included in the days unrestricted cash on hand target is a Rate Stabilization Fund target of \$20 million. The Rate Stabilization Fund's purpose is to lessen or eliminate the rate impact due to an unforeseen event that impacts Platte River's ability to meet the minimum legal debt service coverage requirement.

## **TARGET DEBT TO CAPITALIZATION LESS THAN 50 PERCENT**

A debt to capitalization ratio less than 50 percent provides Platte River with a strong balance sheet and reduces the risk of becoming over leveraged in the debt market.

## **MAINTAIN ACCESS TO LOW COST CAPITAL AND FAVORABLE CREDIT RATINGS**

Interest rates between various credit ratings can fluctuate significantly depending on market conditions. Maintaining a strong credit rating provides access to low cost capital and favorable financing terms, resulting in lower overall debt service expense.

## **PROVIDE STABLE AND COMPETITIVE WHOLESALE RATES**

Rate projections are developed and reviewed by the board at least annually. If possible, projected rates modifications required to meet *SFP* criteria will be spread over multiple years to provide more stable rates from year to year. Retail rate comparisons with other utilities in the region are used to measure the competitiveness of wholesale rates charged to the municipalities.

## **MAINTAIN BOND REQUIRED RESERVES**

The General Power Bond Resolution requires a Reserve and Contingency Fund be maintained at a minimum of 2 percent of net plant. Bond service and bond reserve funds are maintained as required.

## **PRUDENTLY MANAGE AND INVEST RESERVES**

Platte River's investments will be managed in accordance with Platte River's Investment Policy. The primary objectives of the investment activities shall be safety, liquidity, and yield while achieving market returns comparable to benchmark performance.

## **VARIABLE RATE DEBT MANAGED IN ACCORDANCE WITH INTEREST RATE RISK MANAGEMENT POLICY**

The Board approved Interest Rate Risk Management Policy has established guidelines to govern variable rate debt.

## **MANAGE FINANCIAL RISK**

Platte River's financial risks will be managed in accordance with, but not limited to, the following Board approved documents: Energy Risk Management Policy, General Power Bond Resolution, Interest Rate Risk Management Policy, and Power Supply Agreements. The Energy Risk Management Committee and the Risk Oversight Committee are charged with managing Platte River's business risks.

# LEGISLATIVE AND REGULATORY ISSUES AND POSITIONS

APPENDIX D

## ENVIRONMENTAL POLICY AND PRINCIPLES

Many of the key issues Platte River faces from a legislative and regulatory perspective relate to the environment. This section summarizes Platte River's Environmental Policy.

Platte River uses state-of-the-art air quality control systems at its power generation stations to meet or exceed all applicable environmental laws and regulations. As technology develops and opportunities arise, Platte River is proactive in evaluating and implementing improvements

in its power operations that balance environmental and other socio-economic concerns. When new legislation and regulations are proposed, Platte River participates in public processes and supports additional control requirements when costs are commensurate with measurable environmental benefits.

The following principles are used to guide Platte River's decision making and operations:

- Consider environmental factors in planning, design, construction, and operating decisions,
- Ensure compliance with applicable laws, rules, regulations, and permits,
- Conserve natural resources,
- Communicate environmental values,
- Encourage public participation,
- Reduce environmental risks,
- Encourage pollution prevention,
- Communicate environmental values,
- Encourage public participation,
- Support cost-effective programs to conserve energy,
- Coordinate generation and transmission planning with neighboring utilities, and
- Consider environmentally progressive technologies to meet future generation needs.

## CARBON EMISSIONS MITIGATION

Carbon emissions mitigation will be one of the most significant issues facing the utility industry during the upcoming decades. On June 2, 2014, the EPA issued the Clean Power Plan proposed rule. Although the rulemaking process is on-going, it is anticipated that the final rule will require significant reductions in carbon emissions from existing power plants. The very resources that have allowed Platte River to be a regional leader in cost of service and reliability are the focus of the proposed rule.

Prior to the issuance of the proposed rule, Platte River management began an aggressive effort to evaluate options to diversify the future energy supply portfolio and reduce its carbon risk exposure, while also remaining the lowest cost wholesale provider in Colorado. This internal effort stems from the 2013 board of directors strategic retreat, which established carbon reduction guidance for Platte River that aligns with the reductions proposed in the Clean Power Plan. During 2014 Platte River staff was heavily

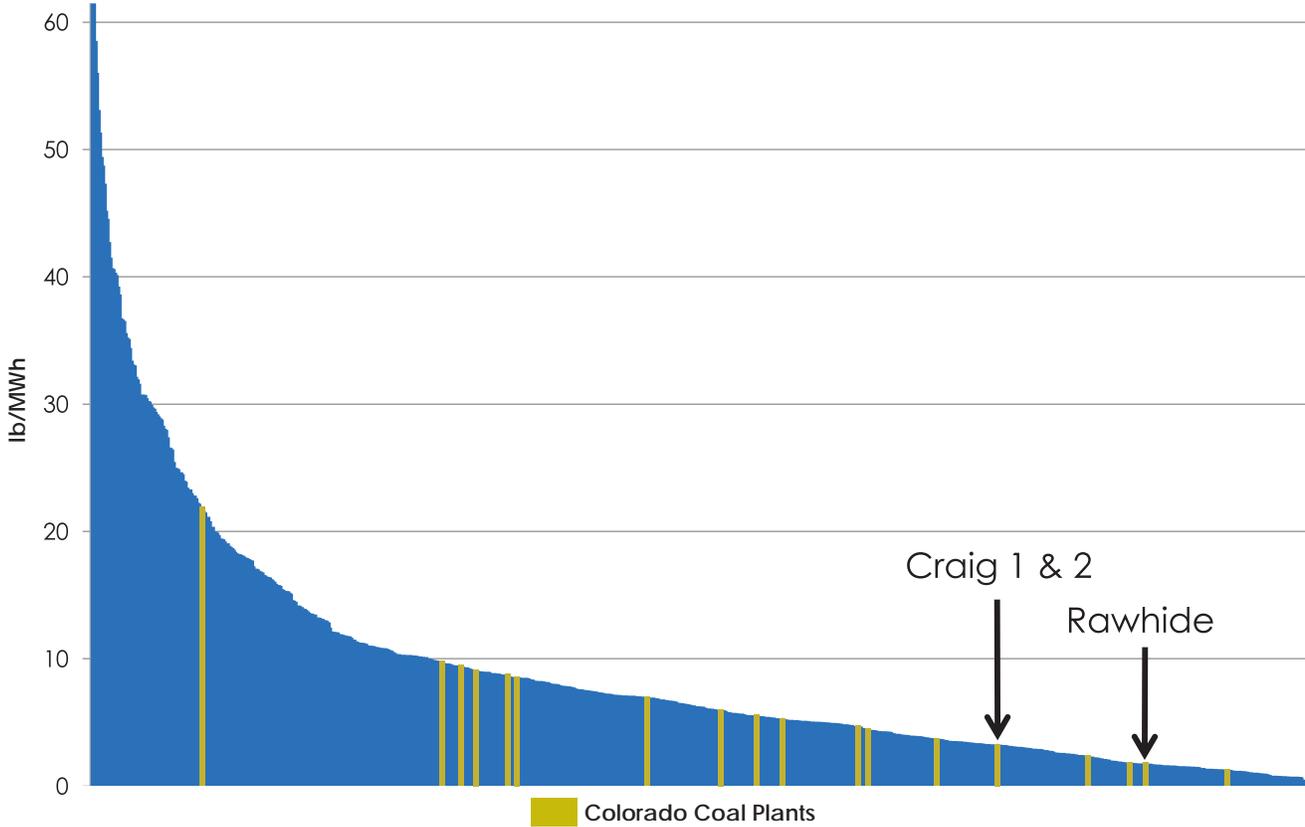
involved in providing comment on the Clean Power Plan during the rulemaking process as well as the analysis of future portfolio options designed to best accomplish the carbon reduction guidance received from the board.

Despite its heavy reliance on coal-fired generation, Platte River approaches the task of carbon reduction with some significant positives, including a large cost advantage over other regional utilities, a solid planning foundation derived from the *Platte River Climate Action Plan* developed in 2009 and the analyses performed to support the 2013 board strategic planning retreat, a history of proven DSM programs and renewable resource production, and strong support and direction from the board. In order to prepare the board to make the best decisions concerning the optimal future resource portfolio extensive and sophisticated analysis is necessary, much of which has commenced during 2014 and will continue into 2015.

# LEGISLATIVE AND REGULATORY ISSUES AND POSITIONS CONTINUED

APPENDIX D

U.S. Coal Plant Emissions of NO<sub>x</sub> and SO<sub>2</sub>



## REGIONAL HAZE RULE

The Regional Haze Rule (RHR) was promulgated in 1999 by the EPA. State implementation has been on-going since promulgation. EPA formally approved the Colorado RHR State Implementation Plan (SIP) in September 2012. The Rawhide compliance plan was submitted to the Air Pollution Control Division on September 16, 2013. Platte River had voluntarily installed low nitrogen oxides (NO<sub>x</sub>) burners on Rawhide Unit 1 in 2005. New air dampers, air nozzle tips, and burner tips were installed during the 2012 maintenance outage and boiler tuning is being conducted. Cost for this equipment was approximately \$1.5 million. With these modifications Rawhide is presently meeting RHR SIP NO<sub>x</sub> emission limits.

The emission limits associated with the Colorado RHR SIP as applied to the Craig Station were litigated in an action filed during February of 2013. A settlement has been reached, but may take a number of months to finalize. If approved, the settlement will require selective catalytic reduction (SCR) equipment on both Craig Units 1 and 2. Platte River's portion of the cost to do so is estimated at about \$60 million over the next seven years.

## OZONE STANDARDS

New and more stringent ozone standards are being considered by the EPA. Presently parts of Larimer County are in a non-attainment area for ozone, but the Rawhide Station is in an attainment area. It is uncertain whether this will change, and if so how the change will affect the Rawhide Station.

## HAZARDOUS WASTE DESIGNATION FOR COAL COMBUSTION RESIDUALS (CCR)

The EPA is evaluating options for revising federal regulations for CCR, including potentially regulating CCR as hazardous waste. CCR includes fly ash, some SO<sub>2</sub> scrubber waste products, and bottom ash from Rawhide and Craig generation facilities. The economic consequences of a hazardous waste designation to utilities, beneficial use industries, and electricity consumers would be severe. The final rule is on hold and it is presently unclear when it will be issued.

# LEGISLATIVE AND REGULATORY ISSUES AND POSITIONS CONTINUED

APPENDIX D

## MERCURY (STATE AND FEDERAL REGULATION)

In response to the 2008 court ruling that vacated the federal mercury rule, EPA promulgated the electric utility Mercury and Air Toxics Standard (MATS) rule. The MATS rule establishes national emissions limits, monitoring and reporting requirements, and work practice standards for listed hazardous air pollutants emitted from coal-fired and oil-fired electric utility steam generating units. The MATS rule is presently tied up in federal court.

Although federal efforts to regulate mercury have been temporarily blocked, Colorado adopted rules to implement mercury reductions in early 2007. These regulations, also known as the Colorado Utilities Mercury Reduction Program, are still in effect as state-only requirements. Installation of mercury monitoring equipment at Rawhide in 2008 was certified for operation to meet the state regulatory deadline of January 1, 2009. Mercury removal equipment was installed and the system was placed in service in November 2010. A mercury emission limit of 0.0174 lb/GWh is required under the state program at Rawhide by 2012 and an emission limit of 0.0087 lb/GWh is required by 2018. Platte River is in compliance with the 2012 requirements and will meet the 2018 emission reduction requirements. Due to the type of coal burned, boiler chemistry and other factors, mercury emissions from Craig Station are low and no emission control equipment is currently required at that facility.

## DODD-FRANK REFORM

The Dodd-Frank legislation and subsequent rulemakings affect a number of Platte River business practices. Platte River has complied with new Dodd-Frank protocols for natural gas hedging. Platte River supports on-going legislative and statutory efforts to limit the application of Dodd-Frank requirements to public power business transactions that are not related to the types of transactions that led to the 2008 financial crisis.

## TAX-FREE STATUS OF MUNICIPAL BONDS

Federal budget concerns have put the tax-free status of municipal bonds at risk. The unique tax-exempt status of public financings dates back to the inception of the income tax, and recognizes the public nature of the capital projects funded by municipal bonds. Platte River has issued \$2.4 billion in debt during its history. The issuance of this debt has been critical for developing the infrastructure necessary to meet the needs of the growing populations in our owner municipalities, and the reduced interest costs associated with tax-exempt financings are passed directly to electric utility customers in these communities. Platte River strongly opposes repealing or altering the current tax-exempt status of municipal bonds.

## TRANSMISSION ACCESS AND PLANNING REFORM

Federal Energy Regulatory Commission (FERC) requires jurisdictional utilities to operate their transmission systems as common carriers. Platte River is non-jurisdictional, but voluntarily adopted an open access transmission tariff. The Platte River open access tariff is modeled after the FERC pro forma tariff with rates consistent with the FERC rate setting formula.

FERC also requires jurisdictional utilities to engage in regional transmission planning. Platte River is a member of WestConnect, a regional transmission planning organization. Platte River is presently involved in efforts associated with regional joint dispatch and transmission tariff reform. Platte River is a member of the Colorado Coordinated Planning Group and the Foothills Planning Group, and has established a transmission planning process as part of its open access transmission tariff.

# LEGISLATIVE AND REGULATORY ISSUES AND POSITIONS CONTINUED

APPENDIX D

## RENEWABLE ENERGY STANDARD AND INCENTIVES

Platte River believes locally-owned and controlled utilities are best suited to determine the proper mix of renewable resources for power generation and delivery. Platte River supports the continuation of federal financial incentives to encourage the development of renewable energy. Renewable energy incentives should continue, be expanded, and be made available on an equal basis to municipal power systems, rural electric cooperatives, and investor-owned utilities.

## FUEL AND RESOURCE DIVERSITY

Platte River supports policies that promote improved technology for all electricity generation sources including coal, natural gas, hydro, nuclear, wind, solar, geothermal, and biomass as vital components of the country's energy portfolio. Plans to encourage diversity should include classifying hydroelectric generation as a renewable fuel source, providing clean coal technology funding, and increasing research and development funds to make renewable energy sources more plentiful and cost competitive.

## PREVENTING MARKET ABUSES

The Energy Policy Act of 2005 (EPAAct 2005) grants FERC expanded jurisdiction to address market manipulation, including authority over public power systems. In 2006, Platte River adopted a policy prohibiting market manipulation and implemented training and audit programs in pursuit of this policy. Subsequently, Platte River has conducted biannual audits. None of the audits have revealed any market manipulation activities.

## SYSTEM RELIABILITY

In 2007, FERC approved enforceable reliability standards. Platte River is registered to perform ten functions, and the municipalities are registered as distribution providers. Platte River has a well established Reliability Compliance Program and promotes a culture of compliance. Platte River continues to assist the municipalities with reliability compliance.

## FEDERAL HYDROPOWER

Federal hydropower comprises a significant portion of the electricity delivered to the municipalities. Platte River supports continued federal ownership and management of hydropower resources through regional Power Marketing Administrations (PMAs). Platte River supports the continued operation of the PMAs within the constraints set forth by Congress through authorizing legislation.

## LOCAL DECISION MAKING AUTHORITY OVER MUNICIPALLY OWNED UTILITIES

Platte River firmly believes that operating decisions affecting municipal utilities are best made at the local level. Federal or state legislation should not mandate actions or decisions regarding the operations of locally owned utilities.

## MUNICIPAL ANNEXATION AND UTILITY SERVICE TERRITORY

Platte River believes that Colorado's Constitution and the existing state statutes regarding electric service provision in newly annexed areas are equitable to all parties. Any proposed changes will be closely scrutinized to ensure that equity is maintained for all parties.

## ACRONYMS

<b>APPA</b> .....	American Public Power Association	<b>MATS</b> .....	Mercury and Air Toxics Standard
<b>CCR</b> .....	Coal Combustion Residuals	<b>MFL</b> .....	Maximum Foreseeable Loss
<b>CDD</b> .....	Cooling Degree Days	<b>MW</b> .....	Megawatt
<b>HDD</b> .....	Heating Degree Days	<b>NERC</b> .....	North American Electric Reliability Corporation
<b>CFTC</b> .....	Commodity Futures Trading Commission	<b>NOx</b> .....	Nitrogen Oxides
<b>CIG</b> .....	Colorado Interstate Gas	<b>PMA</b> .....	Power Marketing Administrations
<b>CO<sub>2</sub></b> .....	Carbon Dioxide	<b>REC</b> .....	Renewable Energy Certificate
<b>CT</b> .....	Current Transformer	<b>RES</b> .....	Renewable Energy Standard
<b>DCLM</b> .....	Direct Control Load Management	<b>RFP</b> .....	Request for Proposals
<b>DSM</b> .....	Demand Side Management	<b>RHR</b> .....	Regional Haze Rule
<b>EPA</b> .....	Environmental Protection Agency	<b>ROC</b> .....	Risk Oversight Committee
<b>EPAct 2005</b> .....	The Energy Policy Act of 2005	<b>SCADA</b> .....	Supervisory Control and Data Acquisition
<b>ERMC</b> .....	Energy Risk Management Committee	<b>SCR</b> .....	Selective Catalytic Reduction
<b>FERC</b> .....	Federal Energy Regulatory Commission	<b>SFP</b> .....	Strategic Financial Plan
<b>GWh</b> .....	Gigawatt Hour	<b>SIP</b> .....	State Implementation Plan
<b>GSU</b> .....	Generator Step-Up	<b>SO<sub>2</sub></b> .....	Sulfur Dioxide
<b>IRP</b> .....	Integrated Resource Plan	<b>SWOT</b> .....	Strengths, Weaknesses, Opportunities, and Threats
<b>IT</b> .....	Information Technology	<b>TRI-STATE</b> .....	Tri-State Generation and Transmission Association, Inc.
<b>kV</b> .....	kilovolt	<b>WECC</b> .....	Western Electricity Coordinating Council
<b>LPC</b> .....	Longmont Power & Communications		
<b>LPPC</b> .....	Large Public Power Council		



*Platte River*  
POWER AUTHORITY

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