

## ATTACHMENT A

# Municipalization Exploration Project Work Plan Update DRAFT

*The overall objective of this work plan is to outline a process that ultimately results in a decision of whether, or not, to municipalize, and what structure of electric utility services best meets the goals and guiding principles, as described in the charter.*

### **Phase I – Post-November 2012 election to January 2013**

***Phase 1 The development of municipalization exploration strategies.***

***A key milestone is the culmination of phase 1, where council selects a strategy.***

***The following sections define the major tasks and inputs of the decision model that will identify the strategies.***

- 1. Develop Project Metrics** – Develop a specific set of metrics, based on the goals and guiding principles of the municipalization exploration charter. These will inform the parameters and criteria for evaluating the inputs and strategies to be presented to council.

**Schedule** – August

**Resources** – Project team and representatives of stakeholder groups

- a. Reaffirm council guidance with respect to the goals and guiding principles
- b. Develop preliminary metrics
- c. Identify and form a public engagement team to develop/ review metrics
- d. Present to council  
Incorporate into decision analysis

- 2. Build Upon Financial Model** – Utilizing existing models (if possible), create a decision support tool for assessing financial viability of strategies.

**Schedule** – June to December

**Resources** – Project team, Finance Department support staff, consultants, and public engagement team

- a. Establish public engagement team to vet financial model assumptions and output
  - i. Establish scope, schedule and frequency of meetings
  - ii. Identify members, include a diverse representation of financial expertise
- b. Define financial model requirements, building on existing models
  - i. American Public Power Association (APPA), Electric Power Research Institute (EPRI) models
- c. Review city consultant and Boulder Clean Energy Business Coalition’s models
  - i. Determine if one, both, or neither can be used for project
  - ii. Determine whether to use a database application
  - iii. Identify additional functionality and applications needed and determine if they can be purchased
  - iv. Integrate IT support into project to help transfer model to city system and provide technical support
- d. Further identify data needs for project due diligence and project financing

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- i. List requirements for each aspect of the project
  1. Financial costs of operating and maintaining utility
    - a. System – distribution
    - b. Control center
    - c. Administrative offices
    - d. Debt
    - e. Capital improvement
    - f. Compliance (e.g., NERC, WECC and other applicable state and federal requirements)
    - g. Power resource
    - h. Technology systems
      - i. Buy or build
      - ii. Transfer of data from Xcel or will it need to be recreated
      - iii. Compatible systems and transition plan
    - i. Staffing
    - j. Community programs/services
    - k. Other
  2. Regulatory filings and rules
  3. Load and consumption data, using variable load and consumption inputs
  4. Population – growth/characteristics
    - a. Business
    - b. Manufacturing
    - c. Residential
  5. Fuel prices and projections – gas and coal
  6. Renewable resource development, distributed generation, storage
  7. Carbon prices
  8. Generating unit construction costs
  9. Xcel financial, system performance, generation attributes, asset costs, projected future rates, etc.
  10. Technology research
  11. Economic assumptions (GNP growth, interest rates, etc)
- e. Compute economic benefits to the community of owning its utility
  - i. Job creation
  - ii. Business innovation
  - iii. Financial
- f. Validate charter based viability of outcomes by comparing to metrics
- g. Develop financing plan
  - i. Determine dependencies/requirements to issue debt and develop overall schedule
  - ii. Hire an advisor with public utility finance experience to develop financing options
    1. Financing of asset acquisition
    2. Ongoing operations – organization costs

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3. Impact of litigation
  4. Develop various financing structures based on timing and market requirements
  - iii. Coordination with Finance Department on debt issue requirements
    1. Determine Charter/ ordinance requirements and Items for council consideration
    2. Budget coordination
    3. City legal financing issues
- 3. Develop a Decision Analysis Tool** – The development of a database model which can combine the various inputs, compare them to specific criteria and metrics, and produce various strategies from which to make a recommendation to council. This will build upon modeling tools created last year but provide for more versatility in analysis.

**Schedule** August – September

**Resources** – IT Department , consultants and external stakeholders who have developed tools

- a. Identify existing models used in prior analysis and determine whether they can be used, with modification, or does a new tool need to be acquired.
  - b. Building on existing data, define and develop the data inputs required to develop strategies.
  - c. IT model assessment
    - i. Determine if financial model can run the scenarios that can create a comprehensive strategy
      1. If yes, define requirements and determine schedule and cost
      2. If no, define requirements and research and select best option
      3. Develop integration of modules to incorporate financial and resource plan, asset values, and assign risk
  - d. Develop a risk assessment process or tool to risk rank the inputs and provide an overall risk assessment of each strategy.
- 4. Legal** – Assemble the legal team comprised of internal and external experts who can evaluate the legal issues associated with state and federal regulations, condemnation requirements and process, and any other applicable legal process associated with the municipalization of the utility. Develop strategies that best address any requirements and any necessary litigation strategy.

**Schedule** – March 2012 to December 2012

**Resources** - Legal team

- a. Assemble legal team comprised of outside counsel and city lawyers
- b. Refine FERC, CPUC, and condemnation timeline and strategy
  - i. Work with Duncan and Allen (outside counsel) to consider a variety of stranded cost-related strategies
  - ii. Determine dependencies and filing requirements
  - iii. Develop overall schedule and budget
- c. Select viable legal strategies and prepare privileged litigation plan
  - i. Develop timeline and dependencies

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- ii. Risk assess options
- iii. Cost of legal action
- iv. Resources needed to support each legal strategy

Note: All privileged and confidential legal strategies will not be publicly discussed

- 5. Define Desired/Viable Resource Mix** – Develop electric resource portfolios that achieve the overall city goals of reducing GHG emissions. The portfolios will include, at a minimum, energy efficiency, demand side management, distributed generation, and renewable resources.

**Schedule** – August to November

**Resources** – Project team and public engagement technical team

- a. Establish scope and schedule for public resource portfolio technical team
- b. Identify and invite members
  - i. Define skills needed
  - ii. Identify members of the public representing diverse opinions
  - iii. Schedule regular meetings with defined objectives to be completed at each
- c. Develop viable resource options (to include energy efficiency, distributed generation, demand side management, renewable, and fossil fuel)
  - i. Identify and select integrated resource modeling expert and software
  - ii. Develop projections of load and consumption for 5, 10, 20 years for Boulder
    - 1. Develop load profiles (if possible) by customer class
    - 2. Develop or model load profiles of largest electric consumers
      - a. Model potential impact of CU generation and IBM self-generating
    - 3. Develop peak and off peak load profile
      - a. Using Xcel data, if accessible
      - b. Extrapolate from utilities with similar characteristics
  - iii. Identify meta-parameters, such as loading order
  - iv. Integration of CAP into Boulder short term and long term resource supply
    - 1. Energy efficiency
      - a. Analyze technologies in use today and emerging
      - b. Using current programs and projections of future potential, Identify resource availability for 5- to 10-year horizon
      - c. Identify data needs to provide adequate information for projecting resource from energy efficiency
      - d. Project amount of KWH and KW, as well as annual cost for various levels of energy efficiency
    - 2. Demand Side Management
      - a. Analyze technologies in use today and emerging
      - b. Using current programs and projections of future potential, identify resource availability for 5- to 10-year horizon
      - c. Identify data needs to provide adequate information for projecting resource from demand side management
      - d. Project amount of KWH and KW, as well as annual cost for various levels of demand side management

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- v. Renewable Resources
    - 1. Identify utility scale renewable options – solar, wind, hydro, other
      - a. Determine availability
        - i. Existing resources
          - 1. Transmission access
          - 2. Availability/capacity factor
          - 3. Cost
        - ii. Development of new resources
          - 1. Optimum location
          - 2. Transmission access
          - 3. Cost
      - b. Determine emerging technologies that should be considered (storage)
      - c. Grid integration
    - 2. Distributed generation (DG)
      - a. Survey of potential
      - b. Technologies
      - c. Grid integration
      - d. Determine impact of DG on load profile
      - e. Cost
  - vi. Traditional fossil fuel generation
    - 1. Existing resources
    - 2. Accessibility/transmission capacity
    - 3. Cost
  - vii. Investigate power supply options
    - 1. Western Area Power Administration (WAPA)
    - 2. Independent Power Producers
    - 3. Assess transmission interconnection potential
  - viii. Model build vs. buy scenarios for utility scale resources
    - 1. Assess the availability and timing for acquiring or building
    - 2. Model scenarios using standard purchase power agreement terms for delivery, reliability, peak and off-peak
- d. Optimize the various resource options
  - i. Use established criteria to set parameters
  - ii. Model resources assuming life cycle and costs to society, long term fuel cost projections and risk, transmission access and cost to wheel,
  - iii. Short term and long term resource strategy

**6. Asset Valuation** – Determine which Xcel assets should be acquired to support the municipalization project, which are unnecessary for this project, any capital improvements necessary to meet the city’s needs, the value of the assets and process for acquiring them. Much of this information may remain confidential until disclosed in litigation.

**Schedule** – June through November 2012

**Resources** - legal team, external consultants, and IT Department.

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- a. Using the outputs of the legal team, determine type and location of assets required for a variety of municipalization strategies
  - b. Develop separation plan, in conjunction with the legal team
    - i. Define assets and benefits
      1. Determine whether any portion of Smart Grid should be included
        - a. Evaluate assets to include fiber, meters, and technology systems to determine whether there is value to the customers and the city in acquiring
        - b. Evaluate future investments in Smart Grid to make it a viable tool for customers
      - ii. Determine location
      - iii. Evaluate need for upgrades or additional interconnection infrastructure
      - iv. Technical separation requirements based on location of Xcel's equipment and city requirements and boundaries
      - v. Develop cost
      - vi. Plan for annexation or other action
    - c. Inventory assets
      - i. Utilize City GIS resources for documentation and research
      - ii. Identify whether other software tools are needed to identify and document assets.
      - iii. Contract with volunteers and interns to assist in data collection from city, PUC and other publicly accessible records
      - iv. Create master list from which to calculate an overall value, depending on the strategy selected (this may mean creating various layers of assets, tied to different separation plans, which can include annexation)
- 7. Reliability** –Assuming NERC requires any utility to meet its reliability requirements. Evaluate the necessary resources, system configuration and requirements to insure overall system reliability equal to or better than Xcel Energy's system reliability for the area. Determine what services, staffing, regulations, and improvements to the system need to be made to achieve this.
- Schedule** – August to November 2012
- Resources** – Project team, key community business advisors and consultants, with reliance on IT GIS support
- a. Establish public engagement team to vet reliability assumptions and determine most effective way to achieve system reliability
    - i. Establish scope, schedule and frequency of meetings
    - ii. Identify members, include a diverse representation of key business representatives and technical experts
  - b. Determine Xcel's reliability for desired system
  - c. Determine NERC compliance requirements
    - i. Determine what applies to Boulder
    - ii. Process and staffing to meet the requirements
    - iii. Coordinate with WECC to meet requirements
    - iv. Cost to comply

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- d. Identify information/modeling needed to determine reserve margins
  - i. Planning reserves
  - ii. Operating reserves
  - iii. Impact of variable local renewable resources
  - iv. Transmission constraints
  - v. Role of qualified scheduling entity
- e. Develop alliances and access comparable utilities for best practices
  - i. APPA
  - ii. Regional Public Power
  - iii. CAMU
  - iv. Rocky Mountain Reserve Group (RMRG)
  - v. Other innovative utility organizations
- f. Using Asset Valuation results, evaluate the adequacy of assets to be acquired to meet both short term and long term reliability needs
  - i. Identify options to achieving
  - ii. Develop a capital improvement plan, with consideration to undergrounding, to insure adequate reliability
  - iii. Obtain large business users input and feedback into reliability plan
  - iv. Develop cost
- g. Determine staffing and resources needed to maintain reliability
  - i. Evaluate organization structures that best achieve reliability goals
    - 1. Review current best practices
      - a. Outsourcing
      - b. Sharing crews and leveraging other public power system resources
      - c. Training and development of city crews
      - d. Maintaining inventory and critical spare parts
      - e. Identify critical customers for reliability (e.g., hospitals)
    - 2. Develop transition assumptions
      - a. Access to Xcel historical data
      - b. Xcel does not share data
      - c. Structural options and cost

**8. Communication and Outreach** – Process for insuring ongoing public information and feedback through the development of the strategies, ultimately resulting in interested and invested members of the public having had the opportunity to comment on those recommendations. This is also the process from which the project will draw on the expertise of the community to provide advice and guidance on technical aspects of the strategy.

**Schedule** – January through December 2012

**Resources** – City Communications support, Project team and facilitators, and outside media services.

- a. See attached plan

Note: Public engagement teams related to specific areas are included in the above work plan

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- 9. Reporting and Updates to council** – The process for keeping city council informed as to the status and budget of the municipalization exploration project.

**Schedule** – August to completion

**Resources** – Project team leaders and communication support

- a. Develop a format and schedule for reporting to council monthly
  - i. Use format presented in July 24 memo – showing accomplishments and work to be done
  - ii. Develop detailed work plan with deadline schedule
- b. Development and presentation of recommendation memo
  - i. Present for public comment
  - ii. Finalize recommendation to council after public input considered

- 10. Key Decision Point** – Council selects recommended strategy **which is the first potential off ramp**

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### Phase 2 – January 2013 to?

*The implementation of approved municipalization exploration strategy, to include legal filings, contract negotiations and actions. During this process, the resolution of any legal proceedings will be a decision point for council as to whether to continue the selected path or some other strategy.*

1. Implement Regulatory Strategy
  - a. Initiate any required filings
    - i. Stranded cost timeline 1-5 years
    - ii. **Key Decision Point** - Outcome of stranded cost litigation is impact to financial model of value of stranded assets - **potential off ramp**
2. Independent 3<sup>rd</sup> party review of municipalization exploration project process and outcome for reasonableness
  - a. Use RFI process to determine availability of needed skill sets, identify and eliminate possible conflicts of interest
  - b. Perform review of process and selected strategy outcome
  - c. Update review for legal outcomes, prior to issuing debt, to be incorporated in any financing due diligence.
3. Issue RFPs
  - a. For services
  - b. Initiate discussions/negotiations for power supply
  - c. **Key Decision Point** – Responses to RFP impact to overall financial plan – **potential off ramp**
4. Initiate any annexation actions to support separation plan
5. Initiate Condemnation proceedings (10-16 months)
  - a. **Key Decision Point** – results of condemnation proceedings will determine value of acquired assets – **potential off ramp**
6. Develop organization staffing plan based on strategy selected, with consideration to contractor model for distribution operations.
7. Update cost assumptions based on the outcome of steps 1-6
  - a. **Key Decision Point** – Will overall cost exceed charter criteria – **potential off ramp**
8. Define programs and services
  - a. What programs and initiatives will be offered through the municipal utility, such as distributed generation, energy efficiency, demand response?
  - b. How will these programs fit into the broader energy and sustainability plan (including water) of the city?
  - c. What financing options best fit program options? How do they help the city choose between program options?
  - d. Should the municipal utility also be a sustainable financing organization?
  - e. Cost benefit analysis of programs to rank and prioritize
9. Finalize financing plan
10. Evaluate forms of governance
  - a. Role of council vs. other board(s)
  - b. Identify roles for advisory board(s) for utility

\* Key decision points that provide council with off ramps should they decide to take another direction

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### **Phase 3 – Upon Completion of Phase 2**

***The operationalization of the utility strategy, based on the outcomes of phase 2, which includes the financing, establishing governance, and staffing of the organization.***

1. Issue debt
2. Acquire assets
3. Identify organization
  - a. Consider contractor needs
  - b. Identify positions , position descriptions
    - i. General Manager
    - ii. Operations
    - iii. Planning
    - iv. Finance
    - v. Customer service
  - c. Determine how the municipality will be organized including divisions, employees, service fleet, etc. This can be informed by the structure of other similarly situated municipal utilities.
    - i. General Manager
    - ii. Operations
    - iii. Planning
    - iv. Finance (including tax authority, accounting, etc)
4. Finalize contract negotiations for power and services
5. Develop rates
  - a. Rate determination models should be drafted and updated throughout the process of developing the utility. This will enable Boulder to identify programs or portfolio options that would significantly impact rates and develop the overall most efficient utility for the city.
  - b. Model Boulder’s rates at initial operation and into the future
  - c. Consider opt-out or self-generation by large users
6. Finalize programs and services
7. Finalize governance