



ST. CHARLES  
SINCE 1834

### AGENDA ITEM EXECUTIVE SUMMARY

Title: Electric Reliability Report – Information Only

Presenter: Tom Bruhl

*Please check appropriate box:*

|                          |                        |                                     |                              |
|--------------------------|------------------------|-------------------------------------|------------------------------|
| <input type="checkbox"/> | Government Operations  | <input checked="" type="checkbox"/> | Government Services 04.22.13 |
| <input type="checkbox"/> | Planning & Development | <input type="checkbox"/>            | City Council                 |
| <input type="checkbox"/> | Public Hearing         | <input type="checkbox"/>            |                              |

|                 |    |           |     |                          |    |                          |
|-----------------|----|-----------|-----|--------------------------|----|--------------------------|
| Estimated Cost: | \$ | Budgeted: | YES | <input type="checkbox"/> | NO | <input type="checkbox"/> |
|-----------------|----|-----------|-----|--------------------------|----|--------------------------|

If NO, please explain how item will be funded:

**Executive Summary:**

For information only.

**Attachments:** *(please list)*

March 2013 Outage Report.

**Recommendation / Suggested Action** *(briefly explain):*

For information only.

|                             |                                |
|-----------------------------|--------------------------------|
| <i>For office use only:</i> | <i>Agenda Item Number: 3.a</i> |
|-----------------------------|--------------------------------|

| # | Date      |   | S/U | General Information   |                             | Cause       |   | Time & Duration |                 |       | Customers |       |
|---|-----------|---|-----|-----------------------|-----------------------------|-------------|---|-----------------|-----------------|-------|-----------|-------|
|   |           |   |     | Circuit               | Address/Location            | Description | # | # Ints          | T. off          | T. on | Mins      | # Out |
| 1 | 3/3/2013  | U |     | 214, 112 S. 13th St.  | Overhead, Customer overload | 1           | 1 | 3/3/13 6:18 PM  | 3/3/13 7:30 PM  | 72    | 1         | 72    |
| 2 | 3/15/2013 | U |     | 626, 1266 Fellows St. | Underground, service fault  | 2           | 1 | 3/15/13 2:14 AM | 3/15/13 1:30 PM | 676   | 1         | 676   |

S/U - Scheduled or Unscheduled  
 Ints - # of Interruptions  
 Long - > 1 min; Short - <1 min  
 Cause # - see table on page 3

| Total Customers this Month               |                          | Days of Month |           |
|--|--------------------------|---------------|-----------|
| Total Customer Minutes this Month        |                          | 31            |           |
| Outage Totals                            |                          |               |           |
|  |                          | This Month    | Last Year |
| <b>Unscheduled Outages</b>               |                          |               |           |
| Long                                     | # Outages                | 2             | 3         |
|  | # Customers Out          | 2             | 3         |
|  | # Minutes Out            | 748           | 135       |
|  | # Customer Minutes Out   | 748           | 135       |
|  | # Within City System     | 2             | 3         |
|  | # Supply to City Minutes | 0             | 0         |
| Short                                    | # Outages (Blinks)       | 0             | 3         |
|  | # Customers Affected     | 0             | 5375      |
|  | # Within City System     | 0             | 0         |
|  | # Supply to City Minutes | 0             | 0         |
| <b>Scheduled Outages</b>                 |                          |               |           |
| Long                                     | # Outages                | 0             | 3         |
|  | # Customers Out          | 0             | 3         |
|  | # Minutes Out            | 0             | 450       |
|  | # Customer Minutes Out   | 0             | 450       |
|  | # Within City System     | 0             | 3         |
|  | # Supply to City Minutes | 0             | 0         |
| Short                                    | # Outages (Blinks)       | 0             | 0         |
|  | # Customers Affected     | 0             | 0         |
|  | # Within City System     | 0             | 0         |
|  | # Supply to City Minutes | 0             | 0         |
| <b>Totals</b>                            |                          |               |           |
| Total Long Outages                       |                          | 2             | 6         |
| Total Short Outages (Blinks)             |                          | 0             | 3         |
| Total Customers Out (Long)               |                          | 2             | 6         |
| Total Customers Affected (Short- Blinks) |                          | 0             | 5375      |
| Total Customer Minutes Out               |                          | 748           | 585       |
| Total Outages Within City System         |                          | 2             | 6         |
| Total Outages in Supply to City          |                          | 0             | 3         |

| Number of Outages (by Cause) |                                  |       |            |         |
|------------------------------|----------------------------------|-------|------------|---------|
| Cause #                      | Description                      | Total | This Month | Rolling |
|                              |                                  | Month | Last Year  | AT      |
| 0                            | Supply to City                   | 0     | 3          | 0       |
| 1                            | Overhead Equipment Failure       | 1     | 1          | 0       |
| 2                            | Underground Equipment Failure    | 1     | 2          | 0       |
| 3                            | Weather                          | 0     | 0          | 0       |
| 4                            | Wildlife                         | 0     | 0          | 0       |
| 5                            | Trees                            | 0     | 0          | 0       |
| 6                            | Substation                       | 0     | 0          | 0       |
| 7                            | Human                            | 0     | 0          | 0       |
| 8                            | Other                            | 0     | 4          | 0       |
| 9                            | Unknown                          | 0     | 0          | 0       |
| 10                           | Vehicle/Dig Ins/Caused by Others | 0     | 0          | 0       |
|                              | Total                            | 2     | 10         | 0       |

| 12 Month Outage Statistics    |                  |                            |
|-------------------------------|------------------|----------------------------|
| Index                         | As of This Month | As of This Month Last Year |
| ASAI (%)                      |                  | 99.9954                    |
| CAIDI (Long) (min)            | 0.00             | 24.27                      |
| SAIDI (Long) (min)            |                  | 2.03                       |
| SAIFI (Long) (ints/tot cust)  |                  | 0.08                       |
| SAIFI (Short) (ints/tot cust) |                  | 0.39                       |

ASAI - Average Service Availability Index  
(customer minutes available/total customer minutes, as a %)

CAIDI - Customer Average Interruption Duration Index  
(average minutes interrupted per interrupted customer)

SAIDI - System Average Interruption Duration Index  
(average minutes interrupted per customer for all customers)

SAIFI (Long) - System Average Interruption Frequency Index  
(# of long interruptions per customer for all customers)

SAIFI (Short) - System Average Interruption Frequency Index  
(# of short interruptions per customer for all customers)

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Cause # - see table on page 3