# A regional approach to improved street lighting

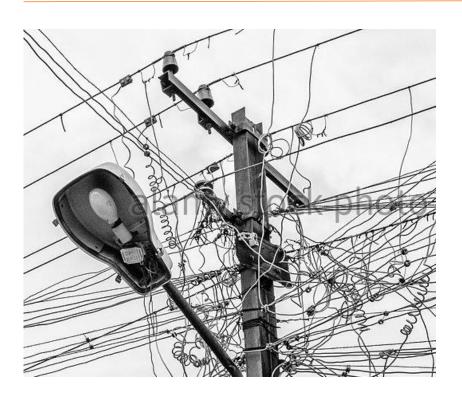
Namoi Dougall, General Manager

Southern Sydney Regional Organisation of Councils (SSROC) Inc.





#### **How Many People Does it Take to Change a Street Light?**



- 138 frustrated councils
- One industry association
- A few consultants
- A couple of utilities
- Several government departments
- A regulator
- and many others....



## Agenda

- About SSROC
- 2. Brief history of street lighting in NSW vs WA
- 3. Challenges with corporatisation of electricity supply
- 4. Street Lighting Improvement Program
- 5. Two solutions to lack of current alignment:
  - Council-managed model
  - New basis of service with utilities



## SSROC's Street Lighting Program...

- Secured the support of 30 councils covering 240,000 lights
- Secured the most energy efficient portfolio of new lighting
- Deployed 87,000+ energy efficient lights (with 101,000 more to come!) saving councils ~\$2.5m/yr
- Started cutting energy consumption
- Cut maintenance times in half
- Reduced pricing claims by \$20m+ in each of the last three regulatory pricing determinations



### **SSROC**



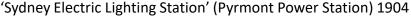
- Association of 11 Sydney councils
- 1.7m residents
- Role of SSROC:
  - Joint policy advocacy on regional issues
  - Joint procurement
  - Focus on environment, energy, affordable housing, transport, waste & planning



## A brief history of NSW street lighting

- Sydney got electric street lighting in 1904
- Municipally-owned power plant & network
- Early infrastructure mostly for street lighting and trams
- Council electricity departments progressively merged into regional county-councils







## Corporatisation of electricity in NSW

- NSW county councils corporatised and merged from 1989 onwards
- Ultimately resulted in 3 stateowned electricity distributors
- NSW Government has recently sold 50.4% of both Ausgrid & Endeavour Energy
- SSROC's program covers nearly all of the Ausgrid region

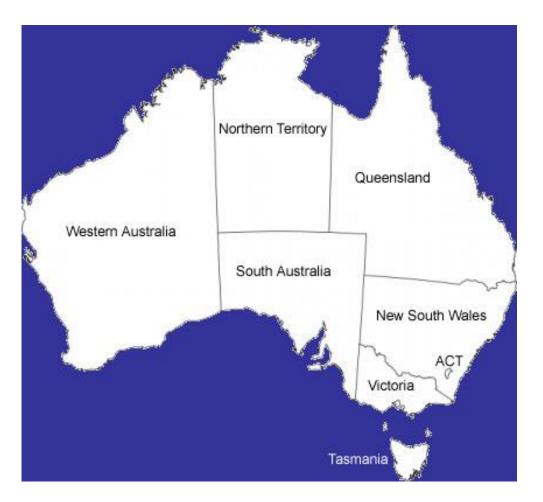




## **Key implications for lighting in NSW**

- Ausgrid now owns 250,000+ street lights
- Amalgamations, corporatisation and privatisation resulted in progressive loss of control of street service by councils
- Councils remain the road authority but without a clear basis of service:
  - No contracts
  - No regulation governing minimum service levels
  - Non-binding public lighting code
  - No meaningful control over technology, maintenance or service levels





## **Street lighting in WA**

Three differences to NSW:

- Do not have same history of county councils
- 2. State-controlled electricity network from 1945 (eg. much earlier than NSW)
- 3. 30 years of commendable work in undergrounding

## ....but a **LOT** more similarities

- Councils are the road authority but without a clear basis of service:
  - No robust contracts
  - No regulation governing minimum service levels
  - No meaningful control over lighting technology, maintenance or service levels
- Big uncontrolled source of greenhouse gas emissions (40-50%)
- Huge cost increases (WALGA reported 100%+ since 2007/08)
- Councils seeking more transparent and competitive tariffs
- Councils exploring contestability and access frameworks
- Wanting more up to date technologies and bulk rollouts of these



## Seemingly endless frustration.....









Billings Culture Opinion Last Best Blog

Prairie Lights Lay of the Land

## Billings Montana Diversions At Your Service Guest Editorial: PSC should require energy-efficient street lights Share Email A Print

By: RUSS DOTY | April 25, 2014



Since early 2009, Los Angeles has installed 147,704 Dark Sky Association-approved LED street lights. That created a 63.3 percent reduction in street lighting energy use and \$7.7 million in annual savings.

During that time, NorthWestern Energy fought petitions to the Montana Public Service Commission seeking energy-use reductions. Our current petition provides a way to pay for the LED retrofit while also cutting taxes

We ask the PSC to eliminate an "ownership" overcharge. It is costing Montanans more than \$2.1 million a year. We also seek a refund of approximately \$25 million in past overcharges. That's more than enough

NorthWestern Energy moved to strike much written, under-oath testimony that we've pre-filed in the case. money to implement energy-efficient LED technology. Some is by Seattle City Light's Edward Smalley, former director of the Department of Energy's Municipal

#### LAST BEST BLOG

## Minnesota Avenue's Oasis sign comes down



We reported a couple of weeks ago that the old Oasis Bar sign on Minnesota Avenue had been sold to a local, private collector.

## Daines introduces bill he opposes



Sen. Steve Daines, R. Mont., who has been criticized for his silence on healthcare reforms, took to the Senate floor Thursday to thrust a fresh new proposal into the Senate debate: Medicare for all.

Visit Blog



### Frank discussion needed

- 1. Poor alignment of interests must be addressed
- 2. Lack of clear governance framework untenable
- 3. Pressure will continue to build if ignored

Remember, this is <u>not</u> unique to WA

You have friends to learn from and to discuss the issue with in other jurisdictions







## Two main solutions

- Council-managed model of street lighting
- 2. New basis of street lighting service by working with utility



## **Council-managed model**

- 1. Requires access rights to poles on reasonable terms
- 2. Contestability framework needed to ensure safety
- 3. Useful precedent elsewhere
  - Majority of world's street lighting is managed by local councils and other road authorities
  - New Zealand, UK, most of Europe and half of North America



## **Council-managed model**

Auckland
Council –
luminaire
& bracket



Utility power pole



## **SSROC Street Lighting Improvement Program**



- Working primarily to improve utility-owned model
- Now 30 councils (incl non-SSROC)
- 95% of Ausgrid lighting & 40% of NSW lighting

#### **Priorities**

- **1. Pricing Oversight** Advocate for councils in AER pricing reviews
- **2. Improved Governance** Advocacy for binding service regulation
- 3. Improved Technology Negotiating accelerated replacement & new trials
- **4. Accessing Funding** To help accelerated replacements



## **SSROC SLI Program wins**

- 87,000+ LEDs + CFLs + some advanced power supplies on main roads saving councils ~\$2.5m/yr
- LEDs as default on residential roads from 2013
  - 33,000 to date going really well
  - Currently negotiating up to 101,000 more under accelerated program
  - Intermediate roads now LED and trials underway for main roads
- Even before accelerated replacements, energy use now declining by about 2.5% per year due to natural attrition



## **SSROC SLI Program wins**

- NSW Public Lighting Code...now working to improve it and make it mandatory
- Reduced pricing claims by \$20m+ in each of the last three pricing reviews

.....great progress by working together but lots more work to do



## Strength in working together

- Councils should continue to work together on street lighting
- Offers negotiating clarity and strength
- Offers scale
- Reduces costs for councils in a highly specialised area
- Strong precedent
  - IPWEA has identified 11 regional street lighting initiatives around Australia
  - Similar overseas examples in Ontario, Connecticut and Massachusetts where councils are working together on large regional upgrades



