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# **Draft Report**Lighting Program Assessment

# Part 2: Trade Ally Network

Funded By:

**Bonneville Power Administration** 

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# **EXECUTIVE SUMMARY**

The Bonneville Power Administration (BPA) provides energy efficiency technical assistance and program support to its over 140 public utility customers by establishing a set of standard offer programs and setting the reimbursement payments that customer utilities can claim to BPA for qualifying energy efficiency projects. Each utility determines for itself the retail program components that will be available in its service territory. Retail utility conservation programs are generally funded through BPA's Conservation Rate Credit (CRC), a Conservation Acquisition Agreement (CAA), or implemented under the BPA power sales contract.

In October 2009, BPA contracted with Research Into Action, Inc. to complete an assessment of two components of the lighting program available to customer utilities in Program Year 2009. The first component included the distribution of compact fluorescent light bulbs (CFLs) to residential ratepayers through direct-mail or direct-install activities. The second component was an assessment of the Northwest Trade Ally Network (TAN) to determine how it was operating relative to expectations, and to document the expectations and experience of the staff, utility contacts, and registered trade allies.

This document presents the findings from the second component: the assessment of the Northwest Trade Ally Network.

#### **FINDINGS**

BPA has positioned the lighting TAN as a resource for utilities, as well as a path for trade allies interested in participating more fully in utility rebate programs. In establishing the TAN, BPA expected that the effort would support BPA's energy efficiency targets by supporting the processes through which retail utility customers acquire energy savings in the nonresidential sector. BPA also expected that the TAN would provide services that resulted in projects meeting BPA's requirements and that these services would improve satisfaction with BPA's among customer utility contacts and lighting trade allies.

Effectively leveraging a trade ally approach requires a positive feedback cycle: commitment and communication to trade allies, market differentiation for those that are enrolled, and active program marketing on the part of the program administrator. Without all three components, the effectiveness of the approach will likely be limited. Not all utilities are equally engaged in the TAN, which presents a challenge for demonstrating the usefulness of the network itself.

With the establishment of the TAN, BPA provided an opportunity for training and professional education that would both inform market actors of project requirements and increase their knowledge of advances in energy-efficient lighting technology. The TAN also creates a path for communication between BPA, utilities, and trade allies. The TAN-sponsored trainings were the most commonly mentioned benefit among all of types of contacts. Training opportunities were



described by representatives from utilities and trade ally firms as the primary value provided by the network.

The best practice analysis reveals the important role played by retail utilities in effective use of a trade ally network approach. Programs seeking to engage trade allies must articulate a value statement for these businesses. Trade allies taking the time to learn about utility programs or participating in training activities are doing so because they expect value.

In addition to the information provided in training sessions, the TAN offers value by providing forums for discussing coordination and overlap issues among groups of utilities. If these forums lead to increased uniformity of paperwork and incentives, it could provide benefits for trade allies operating in overlapping territories. These benefits accrue to BPA and to utilities seeking to expand their acquisition of energy efficiency resources in that they might encourage trade allies to fully embrace the opportunities provided through utility programs.

# **Remaining Barriers**

# **Targeting Utilities**

The current structure of the TAN provides limited value to utilities not actively engaged in nonresidential lighting efficiency. Utilities with few nonresidential customers can provide rebates, but may not be able to justify dedicating staff or resources to marketing energy efficiency projects to the commercial sector. If utilities do not incorporate the approach into their program design, track TAN registration, or promote the TAN website as a source of qualified contractors, it is unlikely that the trade allies operating in their territories will find value beyond the information presented at periodic training events.

# The Label "Trade Ally Network"

In spite of the name, trade ally networks are utility or program administrator focused. The network actually exists to facilitate the acquisition of cost effective energy savings through independent market actors, it is not a network of trade allies. If BPA wants trade allies to engage with the TAN, there must be an articulated value proposition for them. The trade ally surveys revealed that contacts were seeking to improve themselves and their business. The TAN must offer value to trade allies to keep them engaged. They are pursing participation in the hope that it will help them.

#### RECOMMENDATIONS

#### Clarify the Role of the TAN to Utilities and Trade Allies

It is important to clearly articulate the purpose of the Network. Trade allies seeking information about rebate process or needing to access the lighting calculator may increasingly turn to the



TAN website, particularly if they work in multiple service territories and need a portal to multiple programs.

Even when utility staff are energized by the program opportunity and decide to reach out to trade allies in their service territories, the TAN may not be able to help because of limited resources. Follow-up training or audit support services are not necessarily available to meet requests.

In articulating the role of the TAN to regional trade allies, BPA will need to identify the value proposition from the perspective of the allied firm. The training services are valued, but fewer than 40% of the names on the list of registered trade allies had actually attended a training. In some jurisdictions, registration with a trade ally network is required before a firm is allowed to apply for a rebate, but that may not be possible for a regional organization like BPA. Similarly, trade ally network lists can be promoted directly by program administrators to customers in the market for specific services, but that may also be impractical for BPA. Therefore, what is the value proposition for trade allies in this case?

# Develop a Marketing Strategy That Leverages TAN-Affiliated Trade Allies

The best practice research and the trade ally interviews confirm that trade allies are hopeful that the TAN will deliver leads; promote energy efficiency; market lists of qualified trade allies; or direct customers to the program website for references to quality contractors. Best practice research specifically notes that it is common for trade allies to view the program's marketing as insufficient. Marketing activities can include mass media buys, direct mail, bill inserts, case studies of successful projects, and linkage with a credible message from the utility. These efforts are made difficult by BPA's position as the wholesaler.

Nevertheless, there may be opportunities to improve the program's marketing by (1) promoting energy-efficient lighting upgrades generally to end-use customers, (2) embedding end-use customer information about high quality lighting on the program's website, and/or (3) providing marketing collateral or other program specifics directly to TAN-affiliated trade allies for use with their customers.

# Require a Memorandum of Understanding from Participating Utilities

Retail utilities must commit to marketing energy efficiency and communicate regularly with trade allies operating in their territories if they want to leverage the role of trade allies in the market. Requiring that trade allies attend at least one training improves the likelihood that jobs will meet the efficiency requirements established by BPA, as does establishing simple quality assurance protocols.

BPA should consider requiring an Memorandum of Understanding (MOU) from utilities that register with the TAN. Given the limited resources available to support a regional trade ally network, development of an MOU could establish expectations for using the TAN that will ensure that participating utilities are prepared to work directly with the trade allies in their

territories to support trade ally marketing, leverage trade ally training, and increase the number of nonresidential lighting efficiency projects.

The MOU should clarify what BPA and the TAN will provide and also define what the retail utility is expected to do. This would shift the TAN from an all-comers approach to one that enrolls utilities willing to embrace the TAN model. An MOU would increases the likelihood that the TAN will be successful in a given territory, while reducing the resources that need to be spent in territories with little or no engagement.

# Improve Collection and Analysis of Program and Project Level Data

It is important for BPA to understand the relationship between TAN-affiliated lighting installers and the energy savings expected to flow from qualified projects. A significant finding from the evaluation is that there is a lack of understanding about the savings generated by TAN-affiliated contractors in qualified lighting projects. Utility responses indicated that they do not track the savings by TAN contractors and that BPA does not have a system in place to summarize savings by TAN contract, even though the contractor name is an input on the lighting calculator. BPA is aware of this issue, but has been constrained by reporting systems, policies that allow for utility-specific program modification, and distance from projects inherent in the role as energy efficiency wholesaler. Nonetheless, an effort should be made to improve data collection and analysis.

# TRADE ALLY NETWORK AT BPA

The Bonneville Power Administration (BPA) provides energy efficiency technical assistance and program support to its over 140 public utility customers by establishing a set of standard offer programs and setting the incentive payment thresholds that customer utilities can claim for qualifying energy efficiency projects. Each utility determines for itself the retail program components that will be available in its service territory. Retail utility conservation activities can obtain funding through BPA's Conservation Rate Credit (CRC), a Conservation Acquisition Agreement (CAA), or be implemented under the BPA power sales contract.

In October 2009, BPA contracted with Research Into Action, Inc. to complete an assessment of two components of the lighting program available to customer utilities in Program Year 2009. The first component included the distribution of compact fluorescent light bulbs to residential ratepayers through direct-mail or direct-install activities. The second component was an assessment of the Northwest Trade Ally Network (TAN) to determine how it was operating relative to expectations, and to document the expectations and experience of the staff, utility contacts, and registered trade allies.

This document presents the findings from the second component: the assessment of the Northwest Trade Ally Network.

The information in this section comes from interviews with BPA customer utility representatives, commercial lighting staff, representatives of Evergreen Consulting (Evergreen), and a review of the Statements of Work established for the 2007, 2009, and 2010 program years.

#### CONTEXT

"Trade ally" is the term used in energy-efficiency programs to refer to independent market actors who typically sell, install, or repair energy-using equipment. A trade ally network is a managed network of independent market actors who work with a program to support its goals. Trade allies most commonly have an important role in programs designed to improve energy efficiency in buildings, and thus include vendors, contractors, installers, and suppliers in the building trades. BPA's trade ally network is focused on trade allies likely to be involved in nonresidential lighting upgrades. The members of the NW TAN are primarily electrical contractors or electricians, but may also include general contractors, lighting manufacturers, or lighting distributers.

In Fiscal Year (FY) 2007, BPA identified "significant achievable conservation potential" in commercial and industrial lighting, and prioritized acquiring the energy efficiency resources in these projects by leveraging the influence of trade allies. Trade allies are often the first to learn of a potential project and have substantial influence over what gets specified. This effort was based in part on the demonstrated success other program administrators in the Pacific Northwest had experienced by engaging and relying on trade allies as a key to program delivery.

Without a retail presence, BPA cannot require a certain level of trade ally commitment in order to operate in individual utility territories. For example, Energy Trust of Oregon administers a trade ally network for the Portland metro area and much of Southern Oregon. Energy Trust's trade ally network has a significant role in the program: representatives receive and address issues with incentive applications, collect data about projects, and generally manage the relationship between Energy Trust and lighting contractors or electricians operating in their service territory.

BPA launched the TAN in fall 2007, and contracted with Evergreen to develop the network. Evergreen developed the website and logo, but the role and presence of BPA were intentionally minimized. BPA expected that the TAN services would include identifying, recruiting, supporting, educating, training, and otherwise preparing trade allies to deliver commercial and industrial lighting projects that would meet BPA requirements. The TAN services were expected to:

- Support BPA's energy efficiency targets
- Support the processes through which retail utility customers will acquire energy savings
- Improve customer utility and trade ally satisfaction with BPA's nonresidential lighting efforts
- Result in projects that meet BPA's requirements.

The initial budget of \$365,000 for FY 2008 was reduced to \$315,000 for FY 2009, and then increased to \$750,000 for FY 2010<sup>2</sup>. BPA expects that the additional funding will allow the TAN to conduct more outreach to distributors, host additional training events, and provide more direct program design and consultation services to interested utilities. As originally conceived, the TAN services provided were expected to include:

- Creating, expanding and supporting a regional nonresidential lighting trade ally network
- Training that would communicate BPA requirements for qualifying projects
- Professional education covering advances in energy-efficient lighting technology

002 30W TAIN 2007



<sup>&</sup>lt;sup>1</sup> 802 SOW TAN 2007.

<sup>&</sup>lt;sup>2</sup> These figures do not include activities related to a limited "Turnkey Lighting" pilot effort.

- Promoting the value of conservation and BPA's lighting requirements and tools to trade allies
- Communication with BPA, utilities, and trade allies
- Establishing a framework for "the eventual development of referral services"

Since inception in 2007, the TAN has hosted 32 trainings in four states. We list the total number of attendees at each training in Table 2.1; however, we cannot filter for unique attendees. Therefore, we do not total the number of attendees in this table.

**Table 2.1: TAN Training Summary Statistics** 

LOCATION	2007-08	2008-09	2009-10	TOTAL TRAININGS	NUMBER OF ATTENDEES	AVERAGE NUMBER OF ATTENDEES
Portland, OR		✓	✓	2	365	183
Everett, WA	✓	✓	✓	3	349	116
Tacoma, WA	✓	✓	✓	3	322	107
Kennewick, WA	✓	✓	✓	3	191	64
Eugene, OR	✓	✓	✓	3	188	63
Spokane, WA	✓	✓	✓	3	182	61
Longview, WA	✓	✓	✓	3	154	51
Medford, OR		✓	✓	2	135	68
Kalispell, MT	✓	✓	✓	3	98	33
Roseburg, OR		✓	✓	2	93	47
Bend, OR		✓	✓	2	86	43
Vancouver, WA		✓		1	70	70
Idaho Falls, ID		✓		1	49	49
Coos Bay, OR		✓		1	26	26
TOTAL	7	14	11	32		72

In 2009, BPA required that the TAN contractor develop a pilot or demonstration project using a "direct acquisition approach," in which the TAN staff would implement a full range of activities associated with nonresidential lighting acquisition and demonstrate the effectiveness of leveraging lighting trade allies. This effort, called the "Turnkey Lighting Pilot," resulted in TAN staff selecting three utilities that consented to allow the pilot project to run in their territories and involved extensive project management on the part of Evergreen staff. Through the pilot program, Evergreen staff marketed the BPA lighting program offer, provided training, conducted audits, executed incentive agreements, processed payments, and reported project results to BPA.

The high-level of involvement resulted in increased activities and delivered energy savings in the participating utility territories. However, the cost of the pilot program and the management burden associated with such close engagement prevented it from being extended to all of BPA's customers.

# STAFF AND UTILITY PERSPECTIVES

The TAN is tied to the broader BPA commercial lighting program, but presents a challenge to BPA staff, since BPA does not generally implement retail efficiency programs. For nonresidential lighting efforts, BPA provides a lighting calculator: a spreadsheet that helps customer utilities project savings and determine the incentives BPA would pay for a given project. The utilities are not required to offer a specific suite of programs or to provide incentives for any particular measures; however, if they want to benefit from a wholesale rate credit for conservation efforts, measures must comply with the Energy Efficiency Implementation Manual. Most customer utilities use the BPA lighting calculator tool to identify the incentives available from BPA. Some utilities pay more than the BPA incentive, while others pay less and retain a portion of the incentive payment.

# **Utility Population**

In collaboration with BPA staff and Energy Efficiency Representatives (EERs), the Research Into Action team developed a list of 54 utilities that had either (1) directly installed CFLs in ratepayer homes, (2) mailed CFLs directly to ratepayer homes, or (3) were registered with the TAN. In December 2009, we interviewed 28 utility contacts, prioritizing utilities that had engaged in at least two of the three lighting program strategies being investigated. The 28 utilities were distributed across five states. Table 2.2 shows the portion of interviewed utilities in each state and that reported having direct interaction with the TAN since 2008.

STATE	PERCENT (N)	TAN AFFILIATION (N)
Washington	39% (11)	32% (7)
Oregon	18% (5)	23% (5)
Idaho	29% (8)	32% (7)
Montana	11% (3)	9% (2)
Nevada	4% (1)	5% (1)
TOTAL	100% (28)	100% (22)

Table 2.2: Surveyed Utility Characteristics

We ultimately interviewed 22 utilities that reported having a nonresidential lighting program and some contact with the TAN. Of the 22, all but one utility reported that their nonresidential lighting incentive levels were identical to the BPA standard offer. This utility sets its own incentive levels and does not use the lighting calculator. Seven contacts, when asked to describe

their programs, disclaimed their programs or offered caveats that indicated nascent or inactive programs.

The TAN was established in part to offer a way for utilities to communicate broadly to lighting contractors and electricians working in the nonresidential market. Theoretically, the TAN could help a utility increase its eligible program activity by identifying and training contractors active in their service territories. Through their involvement with the TAN, trade allies could learn to use the BPA lighting calculator spreadsheet, improve their ability to identify opportunities for increased efficiency, and learn about new technologies—all of which would increase the likelihood that they would ultimately refer qualifying projects to the utility for incentives.

In practice, converting training and information to qualifying projects is complicated by the contractual relationship between BPA and its retail utility customers. Each retail utility retains control over the availability and value of incentives for energy efficiency in their service territory. Utilities decide for themselves how much they want to promote nonresidential energy efficiency in their territory. Rural utilities with few nonresidential accounts may choose to meet the efficiency needs of these customers only when contacted directly, while larger utilities or those with a substantial number of nonresidential customers could establish a formal program and use a trade ally network independent of the regional effort.

# **Utility Experience**

Of the 22 utility contacts reporting that they were familiar with the TAN, 17 reported having at least one direct interaction with the TAN. The 17 included one contact reporting extensive, one-on-one interaction with TAN representatives as a participant in the Turnkey Lighting Pilot program in 2009. This contact was enthusiastic in his assessment of the TAN, reporting that, as a result of TAN engagement, his utility completed more nonresidential lighting efficiency projects last year than in the previous 10 years. "I'm sitting in City Hall under T-12 fixtures. And we're the utility!" he said, "It's just hard to get anyone to do anything."

The other 16 contacts said they had attended a TAN-sponsored meeting or training. However, ten of the 16 offered caveats to their responses that indicate their interactions with TAN representatives were fairly limited.

"I know who Roger is. They've put on a few trainings here. But that's it."

"I've gone to meetings and trainings, talked with Roger. But our projects are so limited; I don't think that their program is really focused on utilities that are heavily residential."

"I've been to a few of the seminars they've put on. They are good. We're just a small town — only about 2,000 people. When BPA started this, we invited everyone. There's not a lot going on now... Everyone jumped on it, but it's slowed down."

"They occasionally sponsor activities here in Eastern Washington. I don't think they've provided significant value here. Most people just call me directly.

# **Non-Residential Lighting Programs**

BPA assigns an EER to each utility. EERs are the primary point of contact for utility staff seeking energy efficiency program support, but the BPA lighting manager and other technical staff also are available to contacts at customer utilities needing assistance with a technical question.

Evergreen staff report that trade allies are generally believed to desire uniform program offerings, applications, and rebate levels across utility territories, particularly for those that operate in multiple utility territories. Without mandating specific applications or setting incentive levels, BPA cannot ensure uniformity; but there are valid arguments for utilities having the ability to adjust their programs to match the needs of their customer utilities. BPA provides standardized application language and templates for interested customers that have the potential to improve consistency among regional utilities, but these are used only on a voluntary basis.

# **Linkage between the TAN and Utility Programs**

In the first two years of the TAN, BPA sought to maintain distance between the utilities and the TAN staff. It was expected that the TAN would provide information and services to trade allies, but would not necessarily replace any utility program staff efforts in nonresidential lighting. The Turnkey Lighting Pilot was an exception; and in those territories, the TAN was extensively involved in the lighting program. In the 2010 program year, BPA authorized the TAN contractor to provide more direct assistance to utilities that request it. The expanded scope of the TAN will include targeting utilities with substantial energy-savings opportunities, but which have historically passive lighting programs, as well as utilities that want to integrate a trade ally approach more fully into their efforts.

In our interviews with utility contacts, only seven of the 17 utility contacts who reported having direct interactions with the TAN also said that the TAN was a component of their nonresidential lighting efforts. The ten reporting that the TAN was not part of their nonresidential lighting programs typically reported that their interaction with the TAN was fairly passive and was limited to trainings (Table 2.3). These contacts reported that the trainings were helpful, and several indicated that their utility could be receiving additional benefits from interactions of which they are unaware.

Table 2.3: Contact Experience with the TAN

LEVEL OF ENGAGEMENT	COUNT
Total number reporting direct interaction with the TAN	17
Considered TAN part of their nonresidential lighting efforts	7
Passive interaction; limited to trainings	10

When asked why the TAN was not part of their nonresidential lighting efforts, contacts offered a variety of explanations. Six contacts described characteristics of their service territory as the reason the TAN had not played a larger role. These contacts reported that their service territories were remote or had a small number of nonresidential accounts and that these factors reduced the appeal of the TAN. Two contacts said they had limited involvement with trade allies in their service territories. One indicated that contractors were reluctant to use the fairly complicated BPA lighting calculator because there was a more attractive program in the adjacent Avista territory that relied on deemed savings estimates only.

Six utility contacts reported that customers or contractors contact them directly if they have a project that is likely to qualify for a program, but that there is no formal "program." This is in part because of personal relationships: the utility contact already knows the contractors likely to identify qualifying projects. In these cases, it is unlikely that the TAN will play an important role in the nonresidential lighting effort, unless the utility directs the contractors to participate.

Two contacts said that the TAN had no apparent value to them. One of them, who had attended a class, but had not made the TAN part of his program, said he "hadn't seen a return on investment" for his time. The other believed that the TAN concept was more valuable for utilities serving urban customers and that "someone would have to explain the value to my contractors" before they would engage.

Two other utility contacts noted that, while their utilities were not participating directly with the TAN, the program provided useful information, training, and contractor screening services. As one of these contacts said, "It wouldn't hurt if (the TAN) were part of our program, but a lot of guys that come to the meetings in this area seem not to do much commercial lighting. It seems like there are a couple of contractors that really tap into the programs. TAN is not really doing that here... We've had trainings, but I've never heard the term come up unless I hear it from the utility side."

#### INTERACTIONS WITH TRADE ALLIES

#### **TAN Activities**

In 2009, the TAN organized a "Summer Summit" for utility efficiency program managers. BPA contacts described this summit as a valuable experience for many of the attendees. This event gave program managers an opportunity, and a forum, for sharing their experiences and identifying the lessons they had learned in encouraging nonresidential lighting efficiency projects in their territories.

Contacts at BPA were aware that customer utilities had several concerns about the TAN as it was implemented from 2007-2009. The most prevalent idea expressed to BPA contacts was that the

TAN did not have a large presence in specific utility territories, and thus had not been able to demonstrate a significant benefit.

Contacts at Evergreen have experienced a wide range in the level of receptiveness to TAN outreach efforts among utilities, noting that the level of engagement reflects energy efficiency goals at the utility. Utilities without current or historical direction to obtain specific energy savings targets are often less engaged with their trade allies, and may actually try to protect their commercial and industrial customers from trade allies trying to sell them new equipment. In Washington, Initiative 937 (a clean energy initiative passed by Washington voters in 2006) requires utilities with more than 25,000 customers to obtain all cost effective savings and meet 2010 savings targets. This pressure will likely spur increased interest among some utilities in leveraging independent market actors to meet savings goals going forward.

BPA lighting program contacts and contacts from Evergreen have heard that utilities appreciate the trainings and frequently take advantage of the opportunity to promote their programs to a relevant audience. The utilities that have availed themselves of technical assistance or other services from the TAN have told BPA contacts that they appreciated the information and the opportunity. Others have expressed appreciation for the website.

BPA has positioned the TAN as a resource for utilities, as well as a path for trade allies interested in participating more fully in utility rebate programs. The fact that not all utilities are equally engaged in the TAN presents a challenge for demonstrating the usefulness of the network to trade allies. For Evergreen staff, more robust support of specific utility programs will require knowing program details: specifically, the processes and protocols through which projects are identified, screened, and funded. Without those details, it is difficult for them to identify the specific areas in which the TAN could add value. According to contacts at BPA and Evergreen, the TAN is also limited by the resources available to support TAN-provided training and audits—thus, even when utility staff members are energized by the opportunity and request audit support or follow-up training, TAN staff may not have the resources available to meet these requests.

In discussing opportunities for increasing the impact of the TAN, contacts from Evergreen note that a utility has to commit to the approach. As utilities develop their own programs, the components are established by staff housed at the utility. Without their engagement, the effectiveness of the TAN will remain limited for that territory. Leaders at each utility make decisions about policy that ultimately dictate energy efficiency program strategy. The strategic decisions are influenced by opinions about how important it is to pursue energy efficiency in the nonresidential sector, the specific resources available for trade allies, and the staff expertise required to support complicated lighting retrofit projects.

# **Utility Activities**

We sought to understand how utility contacts interact with trade allies that offer lighting services within their territory. Fifteen contacts reported having no regular or formal method of interacting



with trade allies in their territory. Six reported interacting with lighting trade allies as necessary when they have a qualifying job or are seeking incentives for a customer.

Most contacts described irregular efforts to engage electricians<sup>3</sup> in their territory. Outreach and coordination with trade allies occurs most frequently at TAN-sponsored meetings in their area, although one contact reported hosting an annual breakfast meeting.

Utilities may decide to promote energy-efficient lighting directly to end-use customers, who then find their own contractor. One contact described responding to requests from trade allies who have an interested customer. In this case, the utility staff visit and encourage the customer—often by outlining incentives and expected energy savings. According to this contact, "I don't have time to do the marketing... They [the trade allies] pull me in when they need to."

Two contacts described relatively active engagement with trade allies. One said that he guides new contractors through the program process. Another described an extensive organizing effort that has grown as the economy has slumped, and which involves advertising aimed at business owners. Participating end-use business customers are featured on billboards or in brochures that are distributed widely.

Contacts reported having very little direct interaction with trade allies (including manufacturers and distributors) outside of their territory. Two contacts reported that distributors and wholesalers typically are associated with large lighting retrofit projects. Others believed that distributors and wholesalers were interacting with the TAN, although their impressions of this engagement were not uniform.

- "Warehouses may want to bring in a representative to show me something, but this is ad hoc. We like to let the free market be the free market. Lighting is easy to sell. They are out there doing it; I don't need to promote it."
- "Manufacturers do deal with the TAN. I know they are engaged in Change-a-Light. But, manufacturers have an important way to influence the market. We need to engage them more, get them to push the market."



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<sup>&</sup>lt;sup>3</sup> Although the TAN includes lighting contractors and electricians, many utility contacts referred to "electricians" when speaking, indicating the prevalence of electricians as participants.

#### TAN EFFECTS

Six of the 20 utility contacts reported that TAN-registered contractors had submitted qualified lighting projects. We asked the remaining 14 if they tracked the registration status of the trade allies in their territory. Twelve of these 14 said they did not actively track the registration status of trade allies and admitted they might not know if TAN-registered contractors were submitting qualified projects. Those that did know the status of their trade allies reported that they had access to a list or said simply that they "would know."

Only one contact was certain that TAN-registered trade allies were referring more or larger lighting projects than those who were not TAN-registered. Contacts reporting that they were uncertain noted that it was difficult to ascribe the effect of the TAN with confidence, given the time required for project planning and implementation and that the low volume of lighting efficiency projects occurring in their service territory.

However, discussing the potential effect of the TAN prompted two contacts to consider how the TAN might fit within their market.

- "I would be curious to know how many customers know about the TAN, and if customers are going there to find a contractor. How contractors get a project varies so much... word of mouth, existing client--we just don't know how the lead comes in."
- "One of the supply houses attended a training, and they promote more than the others. But, you never hear the term TAN."

We asked contacts to estimate the portion of lighting trade allies in their region that are part of the TAN. Nineteen contacts answered the question, and 11 said they did not know how many were registered. Only seven provided a percentage, and many of those qualified their answer as a "guess." The estimates ranged from 0 - 80%. In some cases, contacts reviewed the status of each firm in their territory during the interview name-by-name. Comments include:

"Probably about half are signed up. Some are actually actively marketing."

"I haven't looked. If I had to guess, I'd say 30% are members. We have quite a few new contractors this year; I'd guess that they aren't."

We then asked all respondents to indicate the extent to which they agreed with several statements about the TAN (Table 2.4).

STATEMENT

DISAGREE

"1"

"2"

"3"

"4"

"5"

DK/NA

The NW Trade Ally Network does not interfere with my utility's nonresidential efficiency program management. (N=19)

Table 2.4: Agreement with Statements About the TAN

The NW Trade Ally Network supports my energy efficiency efforts. (N=19)	-	4	3	2	7	3
I understand how to use the NW Trade Ally Network. (N=19)	3	4	5	5	2	

Table 2.4 shows that contacts gave the lowest rating to the statement "I understand how to use the (TAN)." Most contacts agreed that the TAN did not interfere with their nonresidential efficiency programs. One of the contacts who gave a "3" to this statement said that he struggled with this, not because of specific TAN activities, but because so many of the trade allies in his area also are Energy Trust trade allies. The comments he hears reflect potential confusion among trade allies operating in multiple territories, not the interference of the TAN per se.

### THE FUTURE

A priority for Evergreen contacts is to encourage the utilities that are clustered together (for example in Puget Sound, the Tri-Cities area, or Lane County) to embrace a market perspective by meeting regularly or coordinating their program parameters. According to Evergreen contacts, the TAN can help facilitate this type of coordination. The 2010 contract expansion has allowed Evergreen to be more specific in outreach efforts—working directly with interested utilities to identify places where the TAN could add value to their efforts.

BPA's understanding of how the TAN links, or fails to link, with customer utility efforts is also limited by the lack of information provided to BPA on the strategies and performance of energy efficiency efforts occurring at each retail utility. The information provided to BPA is often piecemeal or anecdotal. The BPA program portfolio is relatively stable, but individual utility efforts fluctuate as efficiency activities increase or decrease in response to goal attainment, or as focus shifts from one sector to another to compensate for lower than expected engagement. Energy Efficiency Representatives have the most regular contact with utility staff, but tracking the specific program portfolios as they evolve at each utility is an enormous task.

"It's good that we don't speak on their behalf," said one BPA contact of the utility program offerings, "because it's highly likely that we would misspeak."

According to BPA staff, the agency is seeking to encourage more commercial lighting upgrades going forward by (1) increasing rebate levels, (2) building the capacity of the TAN and encourage more utilities to actively support the efforts of their trade allies, and (3) revising and simplifying the lighting calculator.

# **Utility Expectations**

We sought to understand how the services of the TAN might have met, or failed to meet, contacts' expectations, and if there were other services or information that would make the TAN more valuable to their utility. The most common response (offered by seven contacts) was that the training services had met their expectations. Similarly, in considering other, future services,

five contacts requested more training. Six contacts specifically requested additional information or technical support to address new technologies and controls, information about brand longevity or quality, and help with code issues and recruitment.

- "I need recruitment help, not much else. I've gone to the website. They have a nice set of tools, but we need more motivation around here. It's a weird little town."
- "Emerging technologies like LED, or if they had information to share about brands, or particular applications that would work with BPA... I get calls from folks that want recommendations. Who manufactures a good 'whatever'?"

Six contacts reported that they expected or hoped to increase their interaction with the TAN, while four did not express that expectation. One additional contact clarified that he did not believe the TAN was relevant to his service territory and complained about the wording of several of the survey questions, believing that they did not allow him to communicate a "low" value.

# **Other Suggestions**

We asked utility contacts how the TAN could better support their nonresidential efficiency efforts. Eight of them offered suggestions:

- Clarify the BPA program requirements. (Three contacts) Clarify the need for cut sheets and the requirements for material and labor cost tracking. Specify the level of detail required on the invoice. Teach contractors to use the calculator. One contact urged BPA to move towards a deemed savings path for all but the largest or most complicated lighting projects.
- *Increase promotion, advertising, or recruitment.* (Three contacts) Promote lighting projects generally. Help utilities contact and recruit trade allies.
- *Expand training options*. (Two contacts) Increase the level and frequency of training. Provide a path to certification for trade allies.

Those not able to offer specific suggestions for improvement noted that the TAN was doing a good job—even if they believed the TAN had not benefited their territory directly. Often, these



<sup>&</sup>lt;sup>4</sup> Information such as this is available by calling TAN staff; therefore, this comment may indicate utility confusion about how to use the TAN.

contacts were from small utilities, expected to have just a few nonresidential lighting projects, and lacked technical staff.

- "There's nothing more the program can do. It's very good. The approach, the people involved, the support from the Network and from BPA...."
- "I think they are doing fine with what they are doing: they are being used in larger areas. In our area, there's not much they can do. The contractors may be part of the TAN, but we might not know. By the time our members call us, they have a contractor."
- "They are doing a good job of it. I get the newsletter, and I assume that it's going out to the contractors...at least those that are attending the trainings. There are announcements and information in there."

#### **SUMMARY**

The TAN has created a forum for communication between trade allies and utility staff, and provides a point of contact for those seeking information or technical support associated with energy-efficient lighting projects. The trainings are valued and provide an opportunity for lighting experts to become aware of advances in technology, installation, and energy efficiency.

Interviews with utility contacts revealed that many of them do not actively engage the electrical contractors in their areas. Contacts commonly reported knowing all or most of the potential trade allies in their service territories, and in some cases, were able to list them off one-by-one. Engaging with a trade ally approach could require many utilities to more actively track the electrical contractors in their area and encourage TAN registration and training.

However, maximizing the benefit of a TAN approach requires a positive feedback cycle that offers benefits to the trade allies that participate: commitment and communication to trade allies, market differentiation for those that are enrolled, and active program marketing on the part of the program administrator. Without these components, the effectiveness of the Network will likely be limited.

Utility engagement with the TAN varies tremendously, depending on the level of commitment to or use of the model. Trainings are valued, and many contacts believe the approach has value, even if it is not currently benefiting them directly.

# TRADE ALLY INTERVIEWS

Evergreen supplied the research team with a list of 461 trade allies that had registered to be part of the TAN. Registering with the TAN involves submitting an application and providing basic information about the applying firm. License and contractor registration numbers are required, as are three references from previous energy-efficiency projects. After removing duplicates and trade allies located outside Oregon, Washington, Montana, and Idaho, we were left with a list of 396 trade allies.

Since trade allies could be registered with the TAN, but have had no direct contact with the network, the research team sought to identify trade allies that had attended a training or that were known to the TAN staff—indicating that they should recognize the program. Evergreen contacts helped with this process by providing a list that indicated which trade allies had attended training in any or all of the prior three years. Using this information we removed 229 trade allies from the list of 396.

**Table 3.1: Population and Sample Frame** 

	POPULATION AND SAMPLE FRAME		
Original List		461	
Removed	Records with duplicate phone numbers (27)	434	
	Contacts located outside the region (38)	396	
Active Trade Allies	Trade allies that took training since 2007	167	
Call list	Random sample to develop call list	94	

The resulting list of 167 trade allies was entered into ArcGIS, a geographic information system platform, and mapped using the zip code of each trade ally. This helped us understand the distribution of "active" trade allies throughout the region (Figure 3.1).

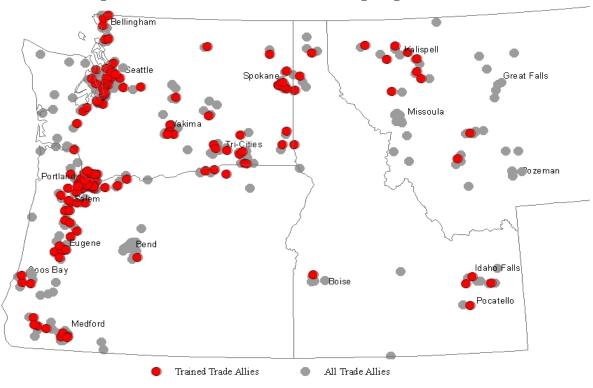


Figure 3.1: Distribution of TRAINED BPA Lighting Trade Allies

From this 167 active trade allies, we randomly selected 94 contacts allocated among the four states. Trade ally calls occurred in January 2010. We sought to complete interviews with 30 trade allies, ten each from Washington and Oregon and five each from Idaho and Montana. Ultimately, we completed interviews with 38 trade allies.

Table 3.2: Disposition

		TOTAL*
Completed		38
List Errors	Wrong or Missing Number	1
	No Longer with Company	5
No Contact Made	Away for Duration 1	
	Call Back: Appointment or Unspecified	23
Not Screened	Over Quota for Segment 25	
Screened Out	Not Qualified 1	
TOTAL		94

The final distribution of interviewed trade allies offered a variety of regional perspectives and included a substantial number of trade allies operating east of the Cascade Mountains.

**Table 3.3.: Locations of Interviewed Trade Allies** 

LOCATION	COUNT
Western Oregon	10
Western Washington	10
Eastern Oregon	3
Eastern Washington	3
Idaho	6
Montana	6
TOTAL	38

Ultimately, the trade ally interviews closely mirrored the distribution of active trade allies (Figure 3.2).

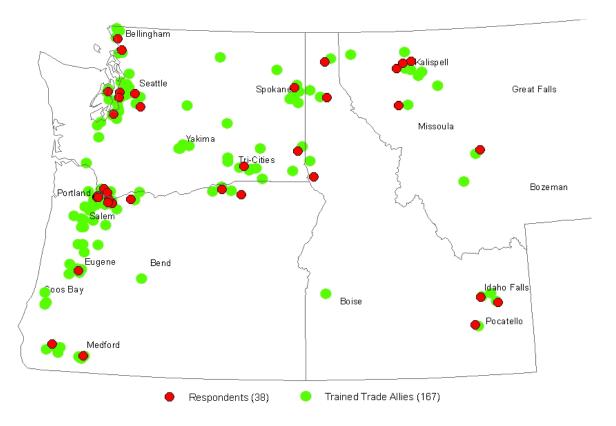


Figure 3.2: Mapping Respondents and TRAINED Trade Allies

We also categorized contacts by the size of their firm, using the number of locations as a proxy indicator of firm size. Firms with only one location were counted as small, while those with more than one location were categorized as not small.<sup>5</sup> We also compared responses by each of the six geographic sub-populations shown and compared the responses of all contacts located west of the Cascade Mountains to the responses of those located east of the mountain range.

**0 + 0** 

<sup>&</sup>lt;sup>5</sup> In most cases we obtained this information from the trade ally contact. When this was not available, we used an Internet search to identify organizations with multiple locations.

#### SOURCES OF TRADE ALLY AWARENESS OF THE NETWORK

Of the 38 trade allies interviewed, 29 (or 76%) could recall how they first heard of the TAN. Those that could recall how they first heard of the TAN most commonly reported that they learned of it through existing relationships or contacts (17 of the 29) or by receiving an email about the opportunity (11). Regardless of the medium, contacts most commonly reported hearing about the TAN from a utility source (13 of the 29) or through communication from another trade ally network (such as Energy Trust).

Figure 3.3: Source of Awareness of Trade Ally Network (N=29) (Multiple Responses Allowed)

SOURCE	COUNT
Utility	13
Energy Trust or Other Trade Ally Network	7
TAN Contact or Training	3

### PURPOSE OF THE NETWORK

Thirty-three of the 38 trade allies were able to articulate their understanding of the purpose of the TAN. Trade allies offered a variety of purposes for the TAN, the most frequently reported purposes were that the TAN served as a liaison or communication vehicle through which trade allies could learn about new technologies, new programs, and energy efficiency in general (17 mentions) and that it existed to save energy or support energy savings efforts among utilities and their customers (mentioned 16 times). Another common assessment (mentioned 13 times) was that the TAN existed to provide a connection to local utilities or utility incentive programs.

In some cases, trade allies were quite eloquent in their description of the purpose of the TAN:

- "It's to tie industry together with BPA and the utilities and their customers and contractors—to work together to solve the energy needs of homes and businesses."
- "It's a liaison organization that disseminates information from BPA and lighting manufacturers to trade allies to save energy."
- "To have Trade Allies unite to increase public awareness of energy savings devices—especially lighting—and to reduce load in the BPA region."
- "Put in place by BPA to promote energy conservation with the NW utilities. To elevate the industry's consciousness of the programs and money available."

In general, the tenor of trade ally descriptions revealed that they expected some benefit from their affiliation with the TAN. These benefits include information and education, and providing tools that help them identify energy savings opportunities from jobs, including: marketing or

promotion of energy efficiency, and assistance in identifying opportunities. Comments in this vein included:

- "It exists to keep us informed on national changes on energy savings programs: rebates, tax credits, updates on new types of projects... and to help us find rebates."
- "To help find projects to save energy."

## REASON FOR JOINING THE NETWORK

Trade ally contacts' reasons for joining the network were also diverse. The most commonly cited reasons for becoming a member of the network were to find new customers or to identify new jobs with existing customers (Table 3.4). Training and information were the next most frequently mentioned reason for registering. Contacts indicated that they expected to receive specific training or information that focused on how to obtain rebates for their customers. They also said that they expected to learn about new products or technologies, as well as how to do a better job of selling energy efficient lighting products.

Contacts offered several other reasons for registering with the TAN. These reasons tended to cluster around improving the marketing of themselves or their firm. Comments in this vein included: "to green up things a little bit," improve customer relations, help find work in multiple states, add skills to lighting resume, and to set up the firm, in case work materializes in other territories.

Table 3.4: Reasons for Registering with the Trade Ally Network (N=?)
(Multiple Responses Allowed)

REASON	COUNT
To Find New Customers	14
To Identify New Jobs with Existing Customers	14
To Receive Training or Information	10
To Network with Other Trade Allies	3
To Enhance Credibility	2
To Connect with Utilities or Rebate Programs	2
Other Reasons	6

#### TRADE ALLY REACH

We sought to understand how widely trade allies traveled and the portion of their work that occurred in the commercial and industrial sector. Most (23 of 38, or 84%) of the surveyed trade allies reported working in more than one utility territory, 20 of whom reported working in four or more utility territories.

To understand the trade ally business services related to residential, commercial, and industrial lighting, contacts were asked to estimate the share of lighting projects as a share of their total sales. The majority of contacts achieve less than 25% of their sales through residential projects (17 of 38), and nearly all reported little-or-no residential sales (30 of 38). These figures indicate that the TAN contractors conduct significant work outside of lighting efforts and likely reflect the preponderance of electricians, electrical contractors, and others on the list that are capable of completing lighting projects, but do not focus on lighting exclusively.

PORTION OF SALES	C&I	RES
None		13
25% or Less	16	17
26% to 50%	6	2
51% to 75%	6	2
76% to 100%	6	1
Don't Know	4	3
Total	;	38

Table 3.5: Lighting as a Portion of Total Sales by Sector

#### **Affiliation with Other Networks**

Ten of the 38 trade allies reported that they belonged to other trade ally networks (eight were registered with Energy Trust of Oregon and two with Northwestern Energy). The contacts reporting membership in the Northwestern Energy trade ally network distinguished that network from the TAN by saying Northwestern Energy's rebates are lower. Two current members of Energy Trust's trade ally network also offered distinctions between that network and the TAN. One of these contacts reported Energy Trust's network is more involved with their community. The other contact reported Energy Trust's incentive applications are more "user friendly" and that Energy Trust notifies trade allies of all changes to the application process.

#### **NETWORK TRAINING SESSIONS**

Thirty-seven of the 38 surveyed trade allies had attended at least one training, with 16 attending more than one training. The training attendees were asked to rate several aspects of training value. Consistent with the experiences of the utilities and reports from BPA and Evergreen contacts, trade allies generally rated the training sessions highly, with few reporting that the trainings were inadequate (a "1" or a "2" on a five-point scale). The highest ratings were given to the overall assessment of value, followed by working with utility incentive programs and helping them sell energy-efficient lighting projects (Table 3.6).

ASPECTS OF TRAINING VALUE: HOW WOULD YOU RATE	1	2	3	4	5
	INADEQUATE			EXCELLENT	
The value of the training overall? (N=36)		1	6	17	12
The usefulness of the information in terms of working with utility incentive programs?(N=37)	1	2	9	11	14
The usefulness of the information in terms of helping you sell energy efficient lighting projects? (N=37)		2	10	15	10

**Table 3.6: Trade Ally Ratings of Trainings** 

# INTERACTION WITH NETWORK

The most common method of communication from the TAN to trade allies is email (reported by 33 of 38, or 87%). The remaining five either reported no contact or could not describe the contact. Four of those that had received emails from the TAN also reported being contacted by phone.

About one fifth (seven of 38) of the contacts reported having sought assistance from the network. Three contacts sought information about qualifying equipment, one sought information on energy modeling for homes, and another wanted a TAN representative to accompany him on an audit (which they did, according to this contact). The two remaining contacts sought information on rebate availability or trade ally and utility contact information for projects outside their immediate areas.

Two thirds (25 of 38, or 66%) of the contacts reported visiting the TAN website, most commonly to find specific items or information, including the lighting calculator, contact information for other trade allies, rebate applications, or utility program contacts or details. Nine reported logging in "just to see it", while two contacts sought to ensure that they were listed.

One of the 12 contacts looking for specific information reported he was unable to find the incentive calculator he sought. Three other contacts suggested four additional services or types of information to make the website more useful, including:

- Information on the status of BPA's evaluation and approval of new technologies for rebates (solar, LEDs),
- Testimonials, customer reviews, or case studies,
- Links and information to non-BPA utility programs, and
- Samples of federal tax credit forms.

Twenty-five of 38 trade allies reported calculating incentive amounts for their customers and submitting nonresidential lighting incentive applications to a utility within the past year. An additional four contacts reported calculating incentives for their customers, even though they had



not submitted a project to a utility within the past year. Of the 29 reporting that they had calculated incentives for their customers, 12 reported using the BPA calculator for that purpose. The frequency of their interaction with the BPA lighting calculator is presented in Table 3.7.

 NUMBER OF TIMES USING THE CALCULATOR
 COUNT

 Five or Fewer
 5

 15 to 25
 4

 50
 2

 More than 100
 1

 TOTAL
 12

**Table 3.7: Experience with Lighting Calculator** 

All of the contacts reported they were able to use the calculator successfully. Five of the 12 were complimentary of the calculator, noting that it was "easy," "user friendly," and "a very good tool." Four contacts offered suggestions for improvements. Those offering suggestions to improve the calculator urged that:

- Drop-down menus be simplified
- Cells be protected to avoid inadvertent overwrite of embedded formulas
- The addition of an automatic conversion of lighting usage hours from weekly to annual hours
- Links to technical resources on the internet be embedded
- A feature calculating the lumens per Watt for a variety of light sources be included

Contacts were asked about any specific benefits they have received from participation in the network. Fourteen trade allies reported that TAN membership had increased their communication with utility staff. Nine of these 14 contacts went on to mention meeting utility contacts at network training sessions as the basis of this increased communication. Seven of these 14 contacts reported the network had benefitted them by helping them to link to utility rebate programs.

# SOURCES OF LIGHTING INFORMATION

Over 70% of the trade ally contacts (27 of 38) reported relying primarily on equipment manufacturers and distributors for new information about efficient lighting products and services. This was followed by internet searches (offered by five contacts), the Lighting Design Lab (offered by four contacts), and then by co-workers, magazines or periodicals, the Consortium for Energy Efficiency, or the TAN (all mentioned once).

#### **OVERVIEW OF NETWORK SERVICES**

Trade allies were asked what, if anything, about the TAN worked particularly well, or that they would not change. Thirteen (34%) trade ally contacts described aspects of the TAN that were working well and should not be changed. The most common response included comments about the quality and features of the trainings (including the information presented, the communication about training offerings and the locations). Others noted that the TAN staff and the audit tool/calculator were effective. One contact stated that "bringing the overall picture together, regardless of which utility you work with" was a valuable feature of the TAN.

Contacts were also asked for suggestions or ideas for improvement. Twenty trade allies (including 15 of the same 25 unable to offer strengths) were unable to offer suggestions or identify aspects that needed to be improved. The eighteen contacts offering suggestions sought a variety of improvements, not all of which are within the purview of the TAN, or even BPA. These suggestions included requests to improve the lighting calculator, expand training opportunities (both in frequency and content), and simplify forms and paperwork. The forms and paperwork required for incentive applications varies by utility and may be an aspect over which BPA has limited influence.

Other suggestions were more nuanced and indicate a desire for improved communication and coordination, particularly within specific utility markets.

- "Improve the understanding of the process: trade allies need to understand what the advantage of having gone to the training is: how do you market new projects? Where do you get your leads?"
- "Change the way it's advertised. Make it more localized to specific communities and utilities; use the radio and Chambers of Commerce."
- "Change the name. It doesn't mean anything in particular. A business hearing of it wouldn't know what it does. This is an issue of branding. Also, I'd like to see more customer referrals from the TAN."
- "Focus on getting parity between programs. The disparity in rebates is a problem."

The notion of the TAN as a marketing entity underpinned several suggestions for network improvement. Such suggestions fall broadly into two categories: utility activities and project marketing. Utility activities include improvements to forms, speeding up rebate processing and payments, and improved communication to rate payers about rebate opportunities. Eight contacts specifically suggested project-marketing improvements that were localized, community-specific activities to help the contacts to sell more projects.

# CAPTURING THE POTENTIAL IN NONRESIDENTIAL LIGHTING PROJECTS

We asked trade allies for their ideas about what needs to happen for the Northwest to maximize the energy savings potential in nonresidential lighting projects. Thirty-three contacts provided



opinions on this. The most common suggestions, offered by almost half of those providing opinions, focused on increasing marketing, educating end-users and providing training for contractors. Specific information needs most often mentioned (and mentioned together) were rebate and energy savings information (11 mentions), followed by information about available technologies and procedures for obtaining tax credits.<sup>6</sup> Other contacts focused on additional ways to overcome lack of capital, either by providing financing or increasing incentives.

Four contacts suggested higher electricity costs are necessary to achieve the energy savings potential for commercial and industrial lighting. Two contacts sought ways to reduce the effect of split-incentive barriers that occur in multi-family rental housing or at organizations where the person paying the bill is different from the one responsible for monitoring equipment performance. Two other contacts suggested a system of project financing is needed to capture the energy savings potential of nonresidential lighting, and two contacts suggested uniformity between utility programs, rebates, and procedures. Finally, two contacts mentioned state tax credits: one specifically noting it will be necessary to continue Oregon's Business Energy Tax Credit, and another wanting state tax credits to be available in all of the Northwest states.

Six other suggestions made by the trade ally contacts included:

- Provide contact information for high-use, commercial-and-industrial customers to the trade allies so those customers can be targeted by the trade allies,
- More outreach to engineers and architects (market actors involved in early decision making for construction projects),
- Find a way to work with "the little Main Street people" (smaller, less lucrative jobs), and
- *Universal adoption of T8 lamps by commercial and industrial customers.*

## **Summary**

Trade ally contacts identified aspects of the TAN that were working well. The most common response included comments about the quality and features of the trainings (including the information presented, the communication about training offerings, and the locations). Others noted that the TAN staff and the audit tool/calculator were effective. One contact stated that "bringing the overall picture together, regardless of which utility you work with" was a valuable feature of the TAN. Trade allies were able to use the BPA lighting calculator and had few



<sup>&</sup>lt;sup>6</sup> Not all of the contacts who suggested additional information specified a type of information.

complaints about it, and almost half reported benefiting from increased communication with utility staff.

Trade allies are looking for value from the TAN for them and their business. While they appreciate the training opportunities, the term "Trade Ally Network" does not convey meaning to them, nor do they believe it is meaningful to their customers.

# **BEST PRACTICES**

#### **METHODOLOGY**

The Trade Ally Network best practices result from a literature review of 11 evaluation reports and conferences papers published between 2001 and 2008. Sources were identified in a search of proceedings from the International Energy Program Evaluation Conference and ACEEE Summer Study, as well as the online libraries of the Consortium for Energy Efficiency, Energy Trust of Oregon and the Northwest Energy Efficiency Alliance.

As a whole, the sources describe the use of trade allies in more than 14 different programs targeting both lighting and more general building retrofit measures. Table 4.1 lists the programs discussed, the funder or implementer and the period of analysis. A complete list of sources is provided in the Bibliography.

Table 4.1: Programs Discussed in Literature Reviewed

PROGRAM NAME	FUNDER/IMPLEMENTER	ANALYSIS PERIOD
Business Program	Efficiency Maine	2006
Government Retrofit Program	Cape Light Compact (Massachusetts)	2006
Production Efficiency	Energy Trust of Oregon (ETO)	2006
Building Tune-Up and Operations Program	ETO	2005-2006
Industrial Efficiency Alliance	Northwest Energy Efficiency Alliance (NEEA)	2005-2006
Focus on Energy Business Programs	State of Wisconsin, Department of Administration, Division of Energy	2005
Prescriptive, Custom and RFP Programs	We Energies (Wisconsin)	2004-2005
Lighting Efficiency Program	Xcel Energy	2003
Small Commercial Prescriptive Lighting Initiative	Sacramento Municipal Utility District (SMUD)	2003
Business Energy Services Team (BEST) Program	KEMA-XENERGY (California)	2002-2003



research/into/action ==

<sup>&</sup>lt;sup>7</sup> Two sources discussed multiple programs, but did not name them individually (Peters et al. 2007, Peters and McRae 2008).

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PROGRAM NAME	FUNDER/IMPLEMENTER	ANALYSIS PERIOD
California Statewide Express Efficiency Program	Pacific Gas & Electric (PG&E)	2002
	San Diego Gas & Electric (SDG&E)	
	Southern California Edison (SCE)	
	Southern California Gas Company (SCG)	
EZ Turnkey Program	SDG&E	2002
Small Business Energy Advantage Program	Connecticut Light and Power	2002
Custom Services Program	Northeast Utilities	1999

### **BEST PRACTICES**

#### Overview

The literature review identified nine best practices. Appendix A lists each best practice, the studies in which each is discussed and the state or region in which it was identified.

# **Rationale and Implementation Approaches**

Each best practice has both a rationale and several suggested implementation approaches. They are listed in Table 4.2. Since trade ally-driven programs rely on independent market actors to deliver the program at a retail level, it is imperative that the program not alienate them. Thus, many of the identified best practices address strategies for managing trade ally expectations, establishing clear communication and ensuring a stable program environment.

# Maintain Good Relationships with Trade Allies

Embracing a trade ally approach means acknowledging that trade allies are a key outreach tool for bringing qualified projects to utility programs. Trade allies typically have more contact with customers than program staff and need to be engaged. Avoid alienating trade allies by (1) maintain frequent contact, (2) maintaining program continuity, (3) marketing the program to potential customers, (4) soliciting trade ally feedback, and (5) streamlining program processes.

# Streamline Program Processes to Make Participation Easy

Complicated program processes deter trade allies from participating and could ultimately reduce the likelihood of program success if trade allies fail to promote the program or their customers are deterred by complicated processes. Strategies for ensuring streamlined processes include:

- Maintaining a single point of contact for trade allies
- Establishing customer eligibility checks that are quick and easy



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- If possible prequalify or pre-approve customer segments.
- Reduce paperwork as much as possible; create online or electronic forms for project data collection.
- Align and coordinate with state energy programs or with the requirements of tax credits.
- Use prescriptive measures or approved measures whenever possible; if specifying lumens per watt, preferred manufacturers, or light level requirements, make sure is information is embedded in program workbooks.

# Use Electronic Project Management Tools To Increase Program Efficiency And Ease Of Participation For Trade Allies

Electronic document submittal has been found to reduce administrative costs, make program participation easier for trade allies, shorten incentive payment cycle time, and improve a program's real-time tracking ability. This feature is particularly useful for high-volume programs. Creating drop-down lists for entering measures and training trade allies on proper use of the tools minimizes errors in data entry and reduces duplication of efforts.

# Provide Adequate Training To Trade Allies

Training improves trade ally ability to correctly complete program documentation and deliver high-quality measures. If possible, allow trade allies to customize their training experience to meet their needs—one program used a "pod" approach to training in which concurrent short sessions allowed trade allies to select the pod that interested them. Particular training topics found to be important include: program procedures; general information about program qualified measures or strategies; and emerging approaches or technology likely to give trade allies an advantage over competitors with no training.

#### Institute Quality Control Processes To Review Trade Ally Work

Quality control ensures that trade allies deliver consistent, high quality work resulting in verifiable savings for the program and positive customer opinions. Quality control starts with screening or certifying trade allies before enrolling them, and continues with the measure specification efforts. Program procedures that specify when an installation is considered "complete" and that requires providing warranty information to customers also improves the likelihood that quality materials will be installed properly.

Quality control activities also include some level of on-site inspection or verification. Specific recommendations associated with inspection include: inspecting the first job submitted by every new trade ally; post-installation inspections by third party of a statistically valid sample; and increasing inspection rates to 100% for trade allies found to be out of compliance.

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# Solicit Trade Ally Feedback during Program Design and Continuously Throughout Program Implementation

Trade allies can provide valuable insights into program operations because they are directly engaged with program processes and have substantial market knowledge. Roundtable discussions designed to solicit feedback and insight resulted in more effective measure selection and program improvements that helped trade allies sell the program more effectively.

#### Perform Marketing and Outreach Activities Directly To Customers

Marketing activities that build awareness of the program opportunity increase the credibility of trade allies attempting to sell the program to their customers. It is common for trade allies to view the program's marketing as insufficient, so program administrators should allocate sufficient resources and develop specific strategies that leverage the utility relationship or coordinate with other actors in the supply chain (such as retailers or distributors who could partner with installers). A simple, clearly written website that articulates the program requirements and communicates the value proposition to customers is important.

#### Maintain Frequent Contact between Program Staff and Trade Allies

Frequent contact with trade allies keeps them informed about the program, builds strong relationships and increases trade ally commitment to the program. Contact can occur by phone, emails, or through in-person meetings or field visits. Breakfast meetings are commonly used, but varied meeting times seem to increase participation. Trade allies have requested newsletters or other program updates to specifically communicate (1) changes in program staff or implementation firms, (2) advance notice of pending changes to the program (policies, eligibility, and processes), (3) rationale behind program rules or restrictions.

#### Maintain Program Continuity

Program changes or lapses discourage trade ally participation. When change is necessary, it's important to give advance notice to trade allies and communicate changes clearly. Elements of discontinuity that have affected past programs include: changes in program staff; changes in implementation contractors; lapses in trade ally contracts; inconsistent funding; sudden changes in program procedures or policies.

#### **Relationships between the Best Practices**

The nine best practices described above fall into two categories: program activities and program results. The majority are program activities: discrete actions that can be taken by program staff designing and implementing the program. One best practice, maintaining good relationships with trade allies, is vital to program success but is achieved as a result of program activities – it is not an actionable recommendation in and of itself. In addition, there are several cause and effect relationships among the best practices. Figure 4.1 diagrams these relationships and shows how some best practices support others.

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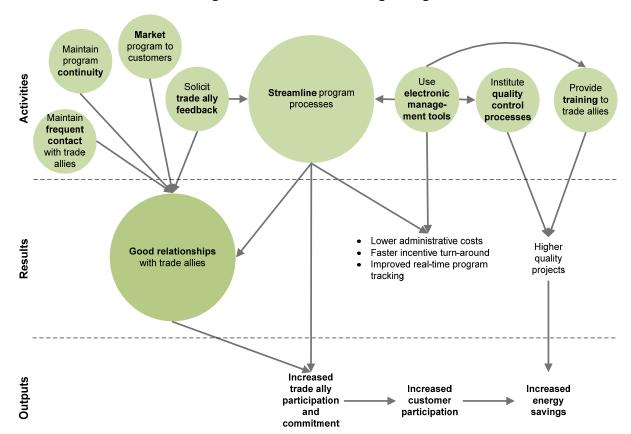


Figure 4.1 Best Practices Logic Diagram

# **Potential Drawbacks of the Trade Ally Approach**

Despite multiple advantages, the trade ally approach also has potential drawbacks. Programs that remain alert to these issues are more likely to avoid them, and thus experience success with their trade allies.

**Trade allies may not take a holistic approach to building energy efficiency**. Trade allies may focus on implementing the measures they know best, those that are the easiest to sell to customers, or those that are the easiest to implement. Previous programs found that trade allies were in fact "capturing the low hanging fruit" and/or installing equipment in which they specialize. This has resulted in missed opportunities at facilities that participated in a program.

**Trade allies may only reach niche markets**. Trade allies may focus on serving have niche markets and may not be interested in marketing the program to a broader audience.

**Trade allies may focus on large projects**. Because trade allies are busy and profit-driven, they may focus on bringing larger projects into the program because they result in a larger payoff for

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the work required. Previous programs found trade allies believed small projects were "not worth the hassle."

Concerns about favoritism may deter trade allies from actively participating in the program. Trade allies in one program noted they were not willing to commit to the program because they were concerned about favoritism, for example, some firms having greater access to program services and benefits. Trade allies were also concerned that certain program practices would impede their ability to compete.

## Comparison of BPA TAN to Best Practices

A comparison of the best practices identified for trade ally programs and the BPA TAN effort todate reveals strengths and areas for improvement. It also reveals the role of the retail utility in successful use of trade allies.

The following best practices are within the purview of the TAN or BPA, but could be augmented by the retail utility effort:

Maintain frequent contact with trade allies. The TAN maintains a website and email notification list through which information about program updates can be communicated. Regular training and other opportunities to learn about technologies and programs also provide contact. However, it is likely that trade allies would be more responsive to information coming directly from the contact at their local utility.

*Maintain program continuity.* BPA has established a relatively stable standard offer program for nonresidential incentives. Retail program continuity depends on the retail utility communicating steady availability of incentives for qualifying projects.

*Solicit trade ally feedback.* The TAN is set up to receive feedback from trade allies, but is not necessarily empowered to make suggestions to retail utilities when the feedback concerns the features of a specific program.

Streamline program processes. This is a major topic of the best practice discussion and is important for not alienating trade allies. BPA can facilitate streamlining by establishing an easy-to-use lighting calculator and a prescriptive incentive path for simple lighting projects. Providing templates or standard incentive application documents to retail utilities could also improve streamlining. The experience of a specific program, however, will depend on the idiosyncrasies at individual utilities—retail utilities must prioritize this best practice and avoid adding unnecessary hurdles.

**Provide training to trade allies.** This best practice is most firmly in the purview of the TAN and BPA. Organizing and hosting trainings requires time and expertise that are not always present at BPA customer utilities. The TAN received high marks from both trade allies and utility contacts for the content of trainings and a regional approach to training ensures that lighting professionals

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have access to quality information regardless of their location. Local utilities can improve the effectiveness and reach of training by requiring trade allies to attend.

Other best practices require the engagement of the retail utility:

*Use electronic management tools.* Utilities that want to encourage trade ally engagement need to provide easy-to-use electronic forms. Forms enabled with drop-down menus have been found to reduce data entry errors. Developing these forms could occur with the assistance of the TAN or BPA.

*Institute quality control processes.* Retail utilities will want to establish simple quality control processes to ensure that the trade allies working in their territories are completing projects that meet the expectations of the program. This could require inspecting only the first job by a new ally or a sample of projects every year. If requested, the TAN could assist in establishing the protocols for or even completing a sample of post-project inspections.

Market the program to customers. This is an important best practice to trade allies and is the one aspect that most firmly in the purview of the retail utility. Utility staff understand their territories and the messages likely to resonate with their ratepayers, and thus are best positioned to reach out to customers with potential projects. Using utility billing information, staff could target messages (including bill stuffers or personal contact) to customers with energy use sufficient to justify considering equipment upgrades.

## **Summary**

The best practice analysis reveals the important role played by retail program administrators in the effective use of trade ally networks. Programs seeking to engage trade allies must articulate a value statement for these businesses. Trade allies taking the time to learn about utility programs or participating in training activities are doing so because they expect value.

Program administrators must commit to marketing energy efficiency and communicate regularly with trade allies operating in their territories if they want to leverage the role of trade allies in the market. Requiring that trade allies attend at least one training improves the likelihood that jobs will meet the efficiency requirements established by BPA, as does establishing simple quality assurance protocols.

# CONCLUSIONS AND RECOMMENDATIONS

BPA has positioned the TAN as a resource for utilities as well as a path for trade allies interested in participating more fully in utility rebate programs. In establishing the TAN, BPA expected that the effort would support BPA's energy efficiency targets by supporting the processes through which retail utility customers acquire energy savings in the nonresidential sector. BPA also expected that the TAN would provide services that resulted in projects meeting BPA's requirements and that these services would improve satisfaction with BPA's among customer utility contacts and lighting trade allies.

Effectively leveraging a trade ally approach requires a positive feedback cycle: commitment and communication to trade allies, market differentiation for those that are enrolled and active program marketing on the part of the program administrator. Without all three components, the effectiveness of the approach will likely be limited. Not all utilities are equally engaged in the TAN, which presents a challenge for demonstrating the usefulness of the network itself.

#### **FINDINGS**

BPA has positioned the lighting TAN as a resource for utilities as well as a path for trade allies interested in participating more fully in utility rebate programs. In establishing the TAN, BPA expected that the effort would support BPA's energy efficiency targets by supporting the processes through which retail utility customers acquire energy savings in the nonresidential sector. BPA also expected that the TAN would provide services that resulted in projects meeting BPA's requirements and that these services would improve satisfaction with BPA's among customer utility contacts and lighting trade allies.

Effectively leveraging a trade ally approach requires a positive feedback cycle: commitment and communication to trade allies, market differentiation for those that are enrolled and active program marketing on the part of the program administrator. Without all three components, the effectiveness of the approach will likely be limited. Not all utilities are equally engaged in the TAN, which presents a challenge for demonstrating the usefulness of the network itself.

With the establishment of the TAN, BPA provided an opportunity for training and professional education that would both inform market actors of project requirements and increase their knowledge of advances in energy-efficient lighting technology. The TAN also creates a path for communication between BPA, utilities and trade allies. The TAN-sponsored trainings were the most commonly mentioned benefit among all of types of contacts. Training opportunities were described by representatives from utilities and trade ally firms as the primary value provided by the network.

The best practice analysis reveals the important role played by retail utilities in effective use of a trade ally network approach. Programs seeking to engage trade allies must articulate a value

statement for these businesses. Trade allies taking the time to learn about utility programs or participating in training activities are doing so because they expect value.

In addition to the information provided in training sessions, the TAN offers value by providing forums for discussing coordination and overlap issues among groups of utilities. If these forums lead to increased uniformity of paperwork and incentives, it could provide benefits for trade allies operating in overlapping territories. These benefits accrue to BPA and to utilities seeking to expand their acquisition of energy efficiency resources in that they might encourage trade allies to fully embrace the opportunities provided through utility programs.

#### **Remaining Barriers**

## **Targeting Utilities**

The current structure of the TAN provides limited value to utilities not actively engaged in nonresidential lighting efficiency. Utilities with few nonresidential customers can provide rebates, but may not be able to justify dedicating staff or resources to marketing energy efficiency projects to the commercial sector. If utilities do not incorporate the approach into their program design, track TAN registration, or promote the TAN website as a source of qualified contractors, it is unlikely that the trade allies operating in their territories will find value beyond the information presented at periodic training events.

## The Label "Trade Ally Network"

In spite of the name, trade ally networks are utility or program administrator focused. The network actually exists to facilitate the acquisition of cost effective energy savings through independent market actors, it is not a network of trade allies. If BPA wants trade allies to engage with the TAN, there must be an articulated value proposition for them. The trade ally surveys revealed that contacts were seeking to improve themselves and their business. The TAN must offer value to trade allies to keep them engaged. They are pursing participation in the hope that it will help them.

#### RECOMMENDATIONS

#### Clarify the Role of the TAN to Utilities and Trade Allies

It is important to clearly articulate the purpose of the Network. Trade allies seeking information about rebate process or needing to access the lighting calculator may increasingly turn to the TAN website, particularly if they work in multiple service territories and need a portal to multiple programs.

Even when utility staff are energized by the program opportunity and decide to reach out to trade allies in their service territories, the TAN may not be able to help because of limited resources. Follow-up training or audit support services are not necessarily available to meet requests.

In articulating the role of the TAN to regional trade allies, BPA will need to identify the value proposition from the perspective of the allied firm. The training services are valued, but fewer than 40% of the names on the list of registered trade allies had actually attended a training. In some jurisdictions, registration with a trade ally network is required before a firm is allowed to apply for a rebate, but that may not be possible for a regional organization like BPA. Similarly, trade ally network lists can be promoted directly by program administrators to customers in the market for specific services, but that may also be impractical for BPA. Therefore, what is the value proposition for trade allies in this case?

#### Develop a Marketing Strategy That Leverages TAN-Affiliated Trade Allies

The best practice research and the trade ally interviews confirm that trade allies are hopeful that the TAN will deliver leads; promote energy efficiency; market lists of qualified trade allies; or direct customers to the program website for references to quality contractors. Best practice research specifically notes that it is common for trade allies to view the program's marketing as insufficient. Marketing activities can include mass media buys, direct mail, bill inserts, case studies of successful projects, and linkage with a credible message from the utility. These efforts are made difficult by BPA's position as the wholesaler.

Nevertheless, there may be opportunities to improve the program's marketing by (1) promoting energy-efficient lighting upgrades generally to end-use customers, (2) embedding end-use customer information about high quality lighting on the program's website, and/or (3) providing marketing collateral or other program specifics directly to TAN-affiliated trade allies for use with their customers.

#### Require a Memorandum of Understanding from Participating Utilities

Retail utilities must commit to marketing energy efficiency and communicate regularly with trade allies operating in their territories if they want to leverage the role of trade allies in the market. Requiring that trade allies attend at least one training improves the likelihood that jobs will meet the efficiency requirements established by BPA, as does establishing simple quality assurance protocols.

BPA should consider requiring an Memorandum of Understanding (MOU) from utilities that register with the TAN. Given the limited resources available to support a regional trade ally network, development of an MOU could establish expectations for using the TAN that will ensure that participating utilities are prepared to work directly with the trade allies in their territories to support trade ally marketing, leverage trade ally training, and increase the number of nonresidential lighting efficiency projects.

The MOU should clarify what BPA and the TAN will provide and also define what the retail utility is expected to do. This would shift the TAN from an all-comers approach to one that enrolls utilities willing to embrace the TAN model. An MOU would increases the likelihood that

the TAN will be successful in a given territory, while reducing the resources that need to be spent in territories with little or no engagement.

#### Improve Collection and Analysis of Program and Project Level Data

It is important for BPA to understand the relationship between TAN-affiliated lighting installers and the energy savings expected to flow from qualified projects. A significant finding from the evaluation is that there is a lack of understanding about the savings generated by TAN-affiliated contractors in qualified lighting projects. Utility responses indicated that they do not track the savings by TAN contractors and that BPA does not have a system in place to summarize savings by TAN contract, even though the contractor name is an input on the lighting calculator. BPA is aware of this issue, but has been constrained by reporting systems, policies that allow for utility-specific program modification, and distance from projects inherent in the role as energy efficiency wholesaler. Nonetheless, an effort should be made to improve data collection and analysis.

# **APPENDIX A: TRADE ALLY NETWORK**

# **BEST PRACTICE SOURCES**

**Table A.1: Summary of Best Practices** 

BEST PRACTICE	STATE OR REGION	STUDIES
Maintain good relationships and frequent contact between program staff and trade allies	California	Dreher et al. 2008
between program etan and trade amee	Pacific Northwest Wisconsin	Peters and McRae 2008
		Dyson et al. 2006
		Haeri and Rock 2006
		Quantum Consulting 2004
Streamline program processes	California Maine	Peters and McRae 2008
	Massachusetts Pacific Northwest	Dethman and Kunkle 2007
		Kyle et al. 2007
		Peters et al. 2007
		Lee et al. 2006
		Quantum Consulting 2004
Use electronic project management tools	California	Kyle et al. 2007
	Maine	Lee et al. 2006
	Massachusetts	Quantum Consulting 2004
Provide adequate training to trade allies	Maine	Dreher et al. 2008
	Massachusetts Pacific Northwest Wisconsin	Peters and McRae 2008
		Kyle et al. 2007
		Lee et al. 2006
		Dyson et al. 2006
		Haeri and Rock 2006
Institute quality control processes	California	Quantum Consulting 2004
Solicit trade ally feedback	Pacific Northwest	Dreher et al. 2008
	Wisconsin	Dethman and Kunkle 2007
		Peters et al. 2007

BEST PRACTICE	STATE OR REGION	STUDIES
Market program to customers	California Maine Massachusetts	Kyle et al. 2007 Peters et al. 2007 Lee et al. 2006 Quantum Consulting 2004
Maintain program continuity  Maintain frequent contact with trade allies	Pacific Northwest	Peters and McRae 2008 Peters et al. 2007

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